



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lawngtlai

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	21	21	22	22	23
Min Temp (°C)	9	9	6	6	6
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	86	92	91	86	63
Min RH (%)	48	42	31	32	21
Wind Speed (Kmph)	4	5	5	5	5
*Wind Direction	N-E	N-E	N-E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

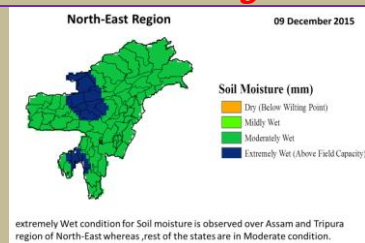
Ni thum kaltha sik leh sa dinhmun tlangpui

December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 2 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 21-23°C a ni ang a. A vawh lai ber in 6-9°C ni tur ah beisei a ni. RH san lai berin 63-92% leh a hniam lai berin 21-48% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 4-5 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 05.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice	• A chi tha leh khat tha chauh



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		MAMIT AIZAWL CHAMPAI SERCHHIP LUNGLEI	Raised bed method • A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation	LAWNGTLAI SAIHA	• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla 16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lunglei

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	23	24
Min Temp (°C)	6	5	3	3	4
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	93	98	98	94	85
Min RH (%)	67	41	27	31	20
Wind Speed (Kmph)	2	4	4	4	3
*Wind Direction	N-E	N-E	E	E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

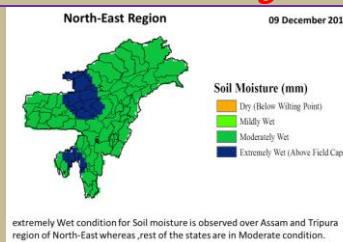
Weather summary of the past three days

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-24°C and 3-6°C. Maximum relative humidity is expected in the range of 85-98% and minimum may from 20-67%. Wind direction would be northeasterly to easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc,



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Chilli	Transplant stage	KOLASIB MAMIT AIZAWL CHAMPHAI	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	SERCHHIP	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI SAIHA	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and

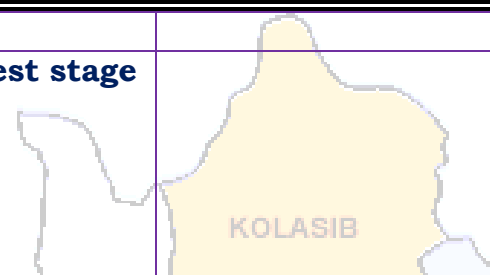
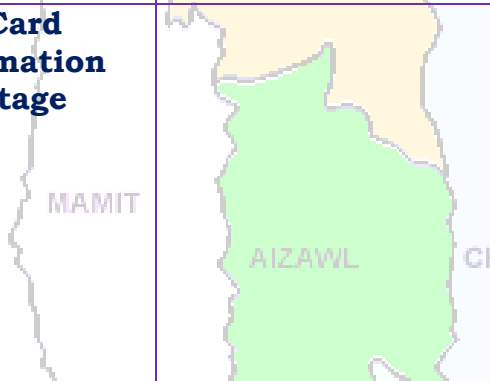
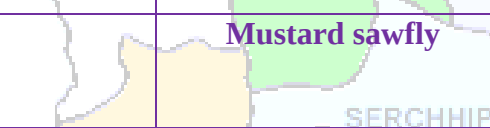
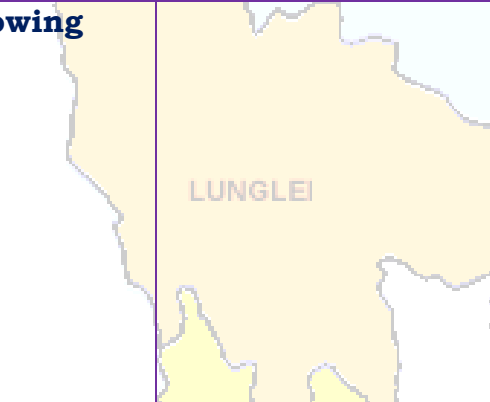
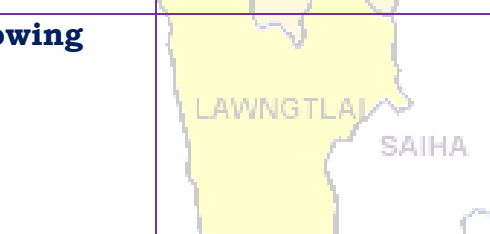


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cowpea	Harvest stage		five pickings in pole type. ❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage		❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
			Mustard sawfly ✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective.
Mustard and toria	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage	KOLASIB MAMIT AIZAWL CHAMPRA	❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever. LUNGLEI	1. Culling of positive pigs or piglets.
	Adult stage		2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease. LAWNGTLAI	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lunglei

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	23	24
Min Temp (°C)	6	5	3	3	4
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	93	98	98	94	85
Min RH (%)	67	41	27	31	20
Wind Speed (Kmph)	2	4	4	4	3
*Wind Direction	N-E	N-E	E	E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

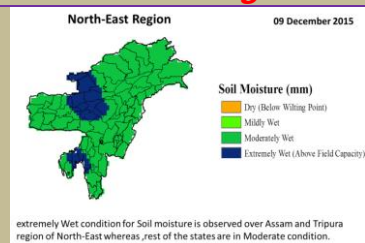
Ni thum kaltha sik leh sa dinhmun tlangpui

December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-24°C a ni ang a. A vawh lai ber in 3-6°C ni tur ah beisei a ni. RH san lai berin 85-98% leh a hniam lai berin 20-67% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuah tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wavi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wavi 2/3 kah thin tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	- Bean hnah, a tang ro leh hnime chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	- Rannung ho chu mankhawmin thah vek tur. - Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAL SERCHHIP	- Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. - A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	- Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). - Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	- Surf tuin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice	A chi tha leh khat tha chauh hman tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla 16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Mamit

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	23
Min Temp (°C)	7	7	4	3	3
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	98	99	97	94
Min RH (%)	42	40	34	33	29
Wind Speed (Kmph)	2	4	4	3	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

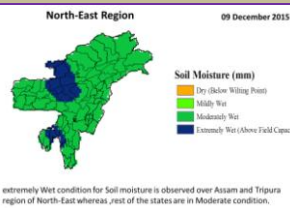
The temperature range for maximum and minimum were 19.3-22.8°C and 13.1-17.9°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 85-92% & minimum of 31-48%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There is no chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-24°C and 3-7°C. Maximum relative humidity is expected in the range of 94-99% and minimum may from 29-42%. Wind direction would be northeasterly to easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

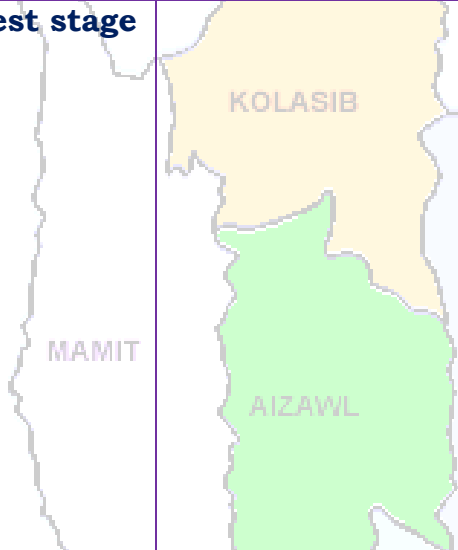
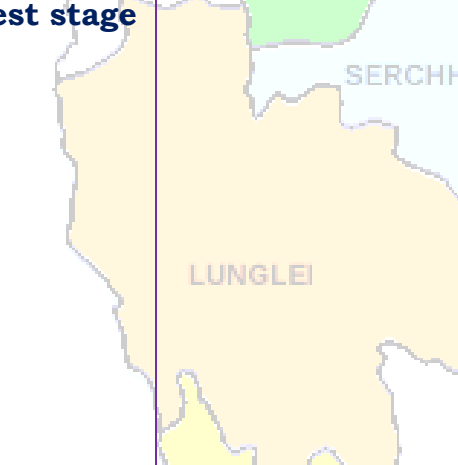


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Mamit

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	23
Min Temp (°C)	7	7	4	3	3
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	98	99	97	94
Min RH (%)	42	40	34	33	29
Wind Speed (Kmph)	2	4	4	3	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

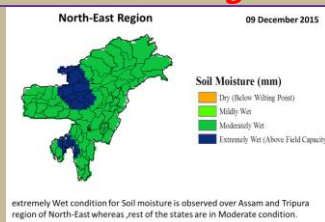
December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 19.3-22.8°C leh a vawh lai berin 13.1-17.9°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 85-92% leh a hniam lai 31-48% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 1 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-24°C a ni ang a. A vawh lai ber in 5-3-7°C ni tur ah beisei a ni. RH san lai berin 94-99% leh a hniam lai berin 29-42% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hniph chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawh tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawh tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtatah a par nasat lain urea chu 70g a pek tur.
Bawrsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhu tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. - A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



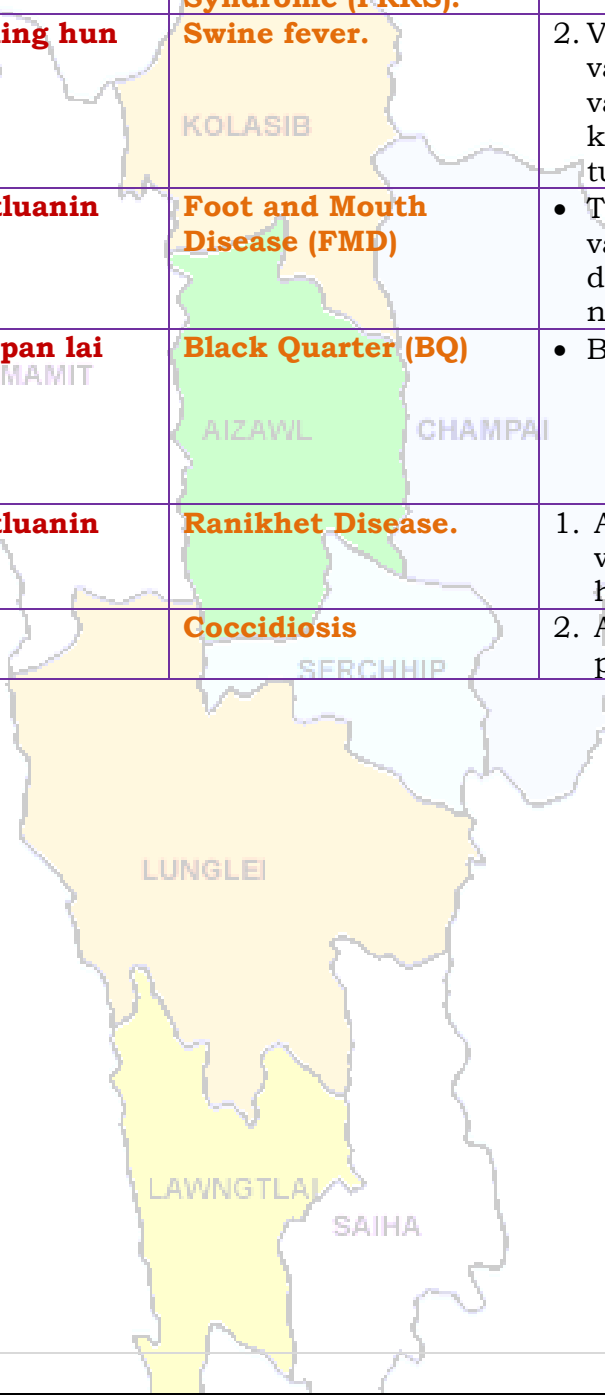
GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	KOLASIB	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



District: Saiha

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	25
Min Temp (°C)	8	6	6	6	6
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly cloudy
Max RH (%)	91	95	95	92	68
Min RH (%)	46	43	30	32	21
Wind Speed (Kmph)	2	4	4	4	4
*Wind Direction	N-E	E	E	N-E	N-E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

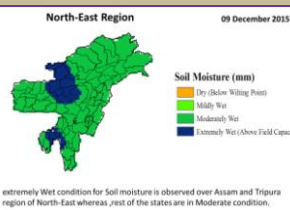
The temperature range for maximum and minimum were 20.4-22.1°C and 9.9-12.4°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 75-84% & minimum of 35-44%. Rainfall recorded for the past three days is **000.00mm.** (Source-mosdac.gov.in)

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-25°C and 6-8°C. Maximum relative humidity is expected in the range of 68-95% and minimum may from 21-46%. Wind direction would be northeasterly to easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

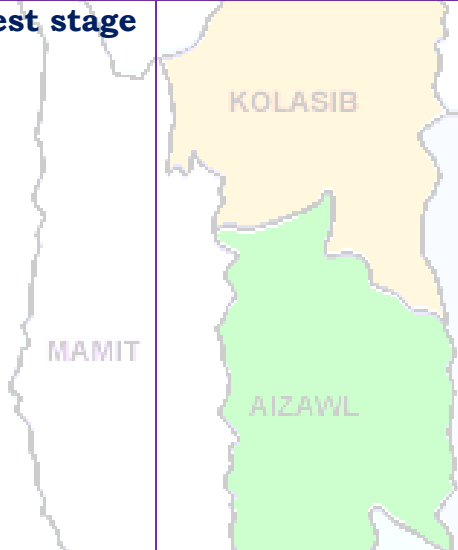
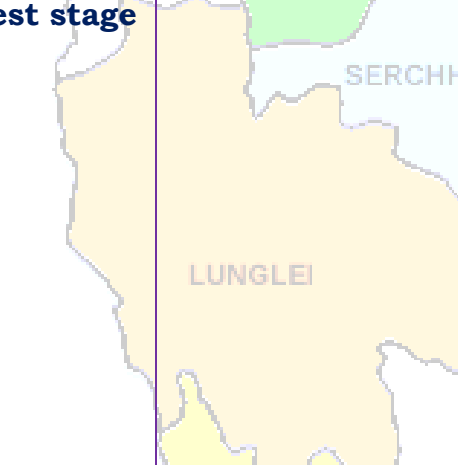


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Saiha

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	25
Min Temp (°C)	8	6	6	6	6
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly cloudy
Max RH (%)	91	95	95	92	68
Min RH (%)	46	43	30	32	21
Wind Speed (Kmph)	2	4	4	4	4
*Wind Direction	N-E	E	E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

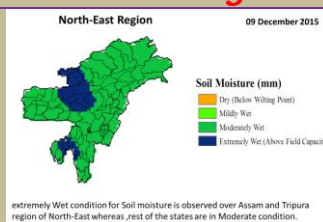
December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 20.4-22.1°C leh a vawh lai berin 9.9-12.4°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 75-84% leh a hniam lai 35-44% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-25°C a ni ang a. A vawh lai ber in 5-6-8°C ni tur ah beisei a ni. RH san lai berin 68-95% leh a hniam lai berin 21-46% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawh tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawh tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtatah a par nasat lain urea chu 70g a pek tur.
Bawrsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur. bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride 4g + Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawnggek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. - A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun		2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA
ICAR RESEARCH COMPLEX FOR NEH REGION
 Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Serchhip

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	22	22	22	22	23
Min Temp (°C)	4	4	4	3	3
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	100	100	100	100	100
Min RH (%)	71	41	26	32	20
Wind Speed (Kmph)	2	4	4	4	2
*Wind Direction	E	E	E	E	E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
 Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

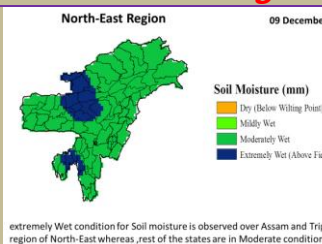
Weather summary of the past three days

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There is no chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 22-23°C and 3-4°C. Maximum relative humidity is expected in the range of 100% and minimum may from 20-71%. Wind direction would be northeasterly to easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

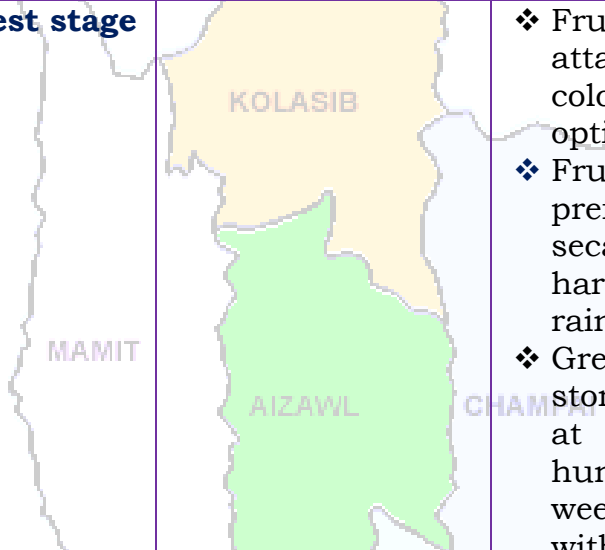
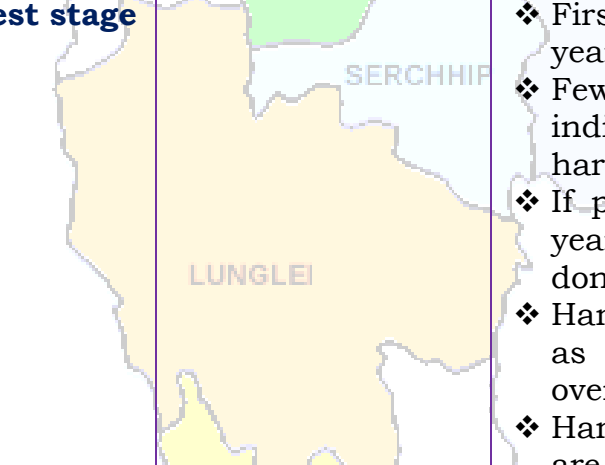


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	plant the seedlings on ridges. ❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	SATHA	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage	KOLASIB MAMIT	❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		Mustard sawfly	❖ Application of carbofuran 3G @ 100g/m ² in nursery is quite effective.
Mustard and toria	Sowing	SERCHHIP LUNGLEI	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the

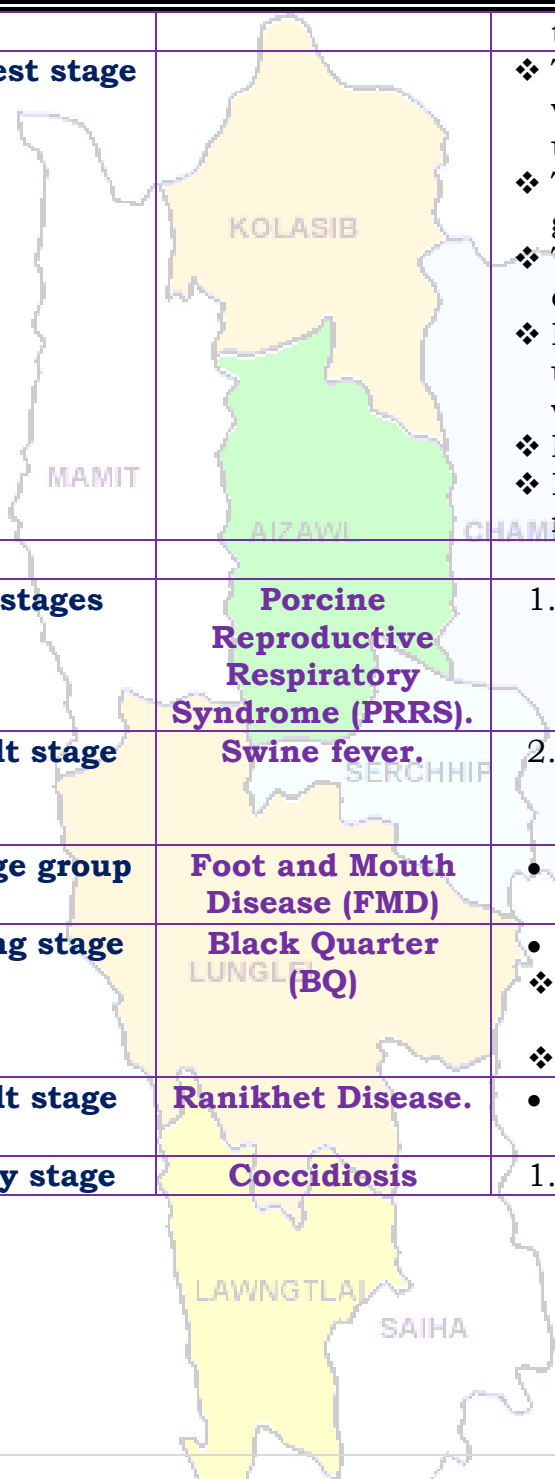


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Ginger and turmeric	Harvest stage		time of sowing ❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Serchhip

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	22	22	22	22	23
Min Temp (°C)	4	4	4	3	3
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	100	100	100	100	100
Min RH (%)	71	41	26	32	20
Wind Speed (Kmph)	2	4	4	4	2
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

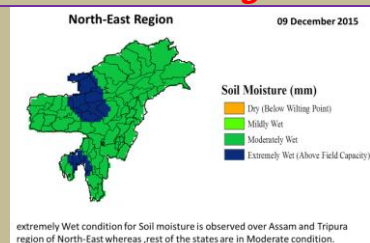
Ni thum kaltha sik leh sa dinhmun tlangpui

December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 22-23°C a ni ang a. A vawh lai ber in 3-4°C ni tur ah beisei a ni. RH san lai berin 100% leh a hniam lai berin 20-71% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
		LAWNGTLAI	



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	- A chi tha leh khat tha chauh hman tur. - Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA

ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lawngtlai

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	25	25	25	24	24
Min Temp (°C)	7	7	7	6	6
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	61	67	71	65	89
Min RH (%)	24	26	28	23	25
Wind Speed (Kmph)	5	5	5	5	4
*Wind Direction	N-E	N-E	N-E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

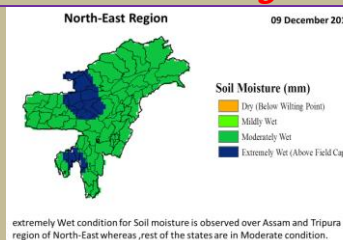
Weather summary of the past three days

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 24-25°C and 6-7°C. Maximum relative humidity is expected in the range of 61-89% and minimum may from 23-26%. Wind direction would be northeasterly with the wind speed of 4-5 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc,



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Chilli	Transplant stage	KOLASIB MAMIT AIZAWL CHAMPHAI	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	SERCHHIP	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI SAIHA	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and

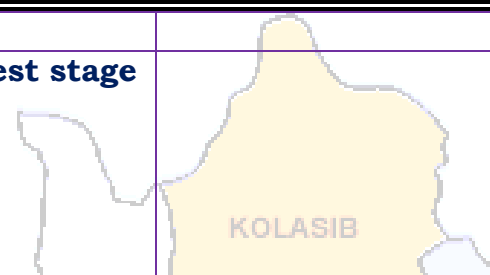
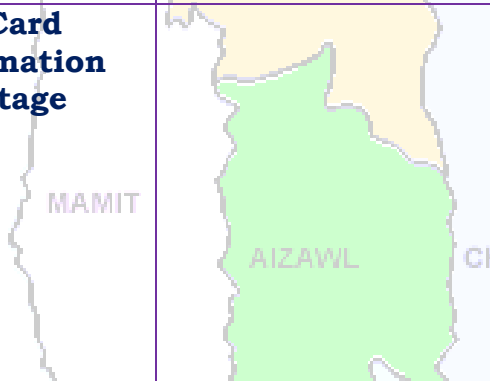
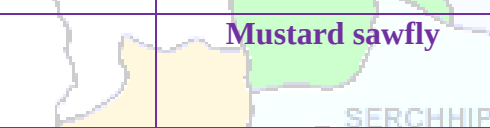
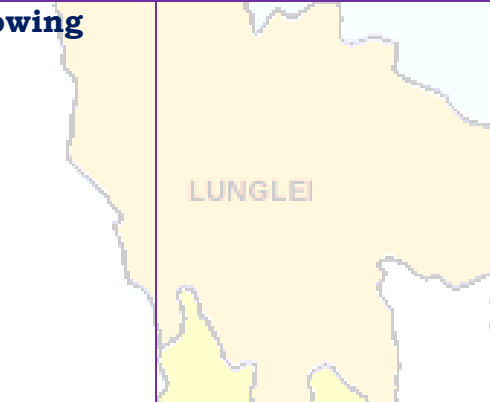
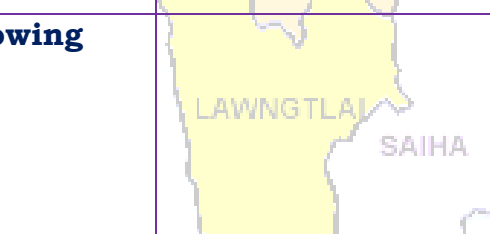


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cowpea	Harvest stage		five pickings in pole type. ❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage		❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
			Mustard sawfly ✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective.
Mustard and toria	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage	KOLASIB MAMIT AIZAWL CHAMPRA SERCHHIP LUNGLEI LAWNGTLAI HA	❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. Culling of positive pigs or piglets.
	Adult stage		2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA
ICAR RESEARCH COMPLEX FOR NEH REGION
 Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lawngtlai

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	25	25	25	24	24
Min Temp (°C)	7	7	7	6	6
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	61	67	71	65	89
Min RH (%)	24	26	28	23	25
Wind Speed (Kmph)	5	5	5	5	4
*Wind Direction	N-E	N-E	N-E	N-E	N-E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
 Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

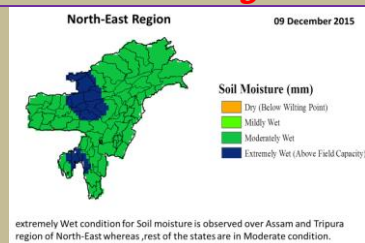
**Ni thum kaltha sik leh sa
 dinhmun tlangpui**

**December 23, 2015 atanga December 27,
 2015 sik leh sa dinhmun hmuhlawk dan**

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 24-25°C a ni ang a. A vawh lai berin 6-7°C ni tur ah beisei a ni. RH san lai berin 61-89% leh a hniam lai berin 23-26% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 4-5 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur. bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride 4g + Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice	• A chi tha leh khat tha chauh



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		MAMIT AIZAWL CHAMPAI SERCHHIP LUNGLEI	Raised bed method • A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation	LAWNGTLAI SAIHA	• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla 16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA
ICAR RESEARCH COMPLEX FOR NEH REGION
 Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lunglei

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	23
Min Temp (°C)	6	6	6	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	85	89	90	88	97
Min RH (%)	22	25	27	22	23
Wind Speed (Kmph)	2	3	3	4	4
*Wind Direction	N-E	N-E	N-E	N-E	N-E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
 Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

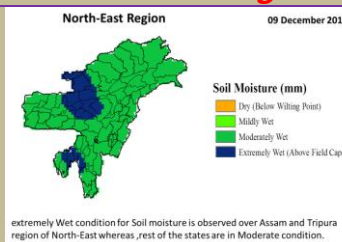
Weather summary of the past three days

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-24°C and 5-6°C. Maximum relative humidity is expected in the range of 85-97% and minimum may from 22-27%. Wind direction would be northeasterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc,



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Chilli	Transplant stage	KOLASIB MAMIT AIZAWL CHAMPHAI	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	SERCHHIP	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI SAIHA	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and

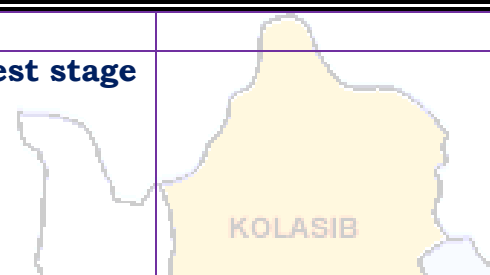
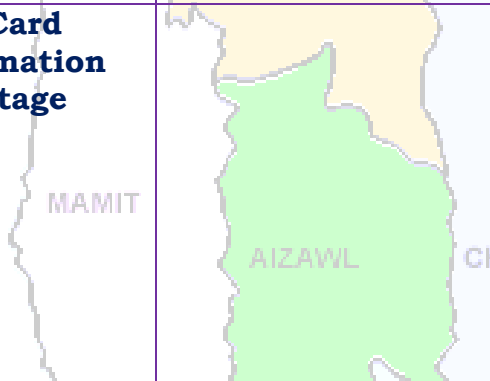
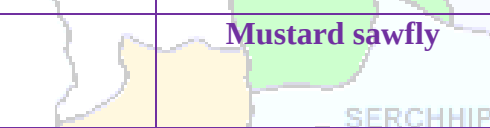
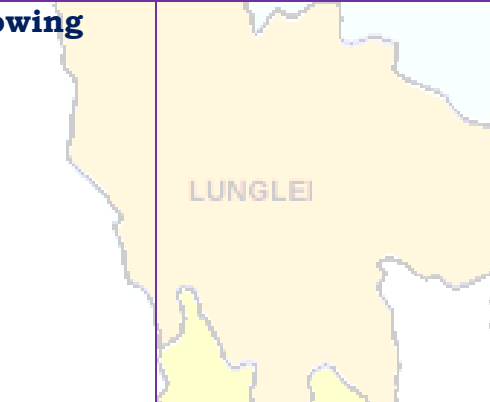
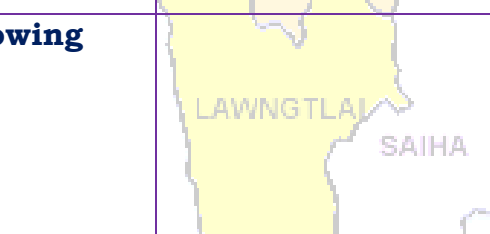


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cowpea	Harvest stage		five pickings in pole type. ❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage		❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
			Mustard sawfly ✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective.
Mustard and toria	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage	KOLASIB MAMIT AIZAWL CHAMPRA SERCHHIP LUNGLEI LAWNGTLAI HA	❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. Culling of positive pigs or piglets.
	Adult stage		2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lunglei

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	23	23
Min Temp (°C)	6	6	6	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	85	89	90	88	97
Min RH (%)	22	25	27	22	23
Wind Speed (Kmph)	2	3	3	4	4
*Wind Direction	N-E	N-E	N-E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

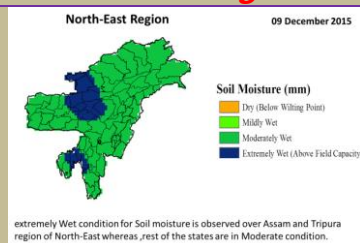
Ni thum kaltha sik leh sa dinhmun tlangpui

December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-24°C a ni ang a. A vawh lai ber in 5-6°C ni tur ah beisei a ni. RH san lai berin 85-97% leh a hniam lai berin 22-27% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuah tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wavi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wavi 2/3 kah thin tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			• Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnime chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAL SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice	• A chi tha leh khat tha chauh hman tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla 16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Mamit

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	24	23
Min Temp (°C)	6	6	6	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	94	96	97	96	99
Min RH (%)	28	27	31	28	28
Wind Speed (Kmph)	4	2	2	2	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

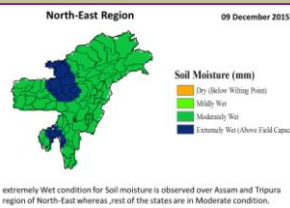
The temperature range for maximum and minimum were 19.1-20.3°C and 8.4-10.9°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 85-95% & minimum of 28-40%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-24°C and 5-6°C. Maximum relative humidity is expected in the range of 94-99% and minimum may from 27-31%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

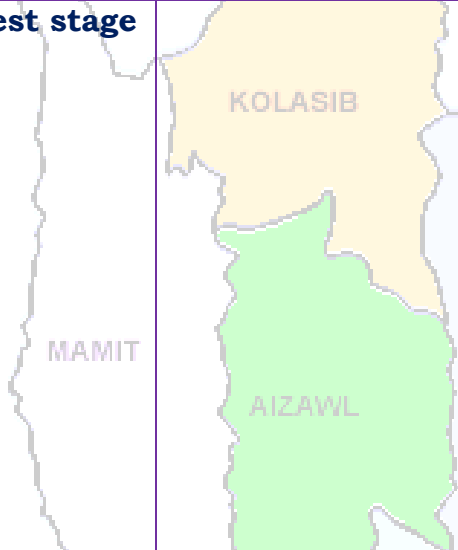
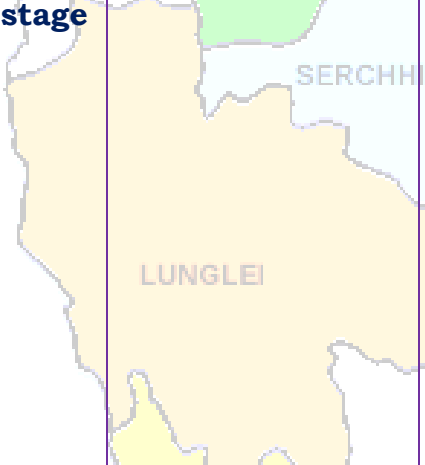


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI, SAIHA	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Mamit

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	24	23
Min Temp (°C)	6	6	6	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	94	96	97	96	99
Min RH (%)	28	27	31	28	28
Wind Speed (Kmph)	4	2	2	2	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

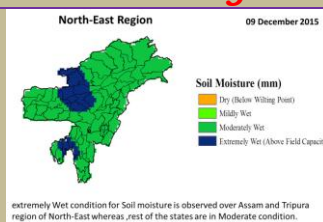
December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 19.1-20.3°C leh a vawh lai berin 8.4-10.9°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 85-95% leh a hniam lai 28-40% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-24°C a ni ang a. A vawh lai berin 5-6°C ni tur ah beisei a ni. RH san lai berin 94-99% leh a hniam lai berin 27-31% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hniph chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawh tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawh tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	Flower/Harvest stage		- Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	Transplant stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla $\frac{3}{4}$ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	A par lai		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhu tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. - A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	KOLASIB	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai MAMIT	Black Quarter (BQ) AIZAWL CHAMPAI	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis SERCHHIP	2. Amprolium emaw coccidiostat pek tur.





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Saiha

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	24	23
Min Temp (°C)	6	6	5	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	65	68	71	66	93
Min RH (%)	23	25	26	23	24
Wind Speed (Kmph)	4	4	4	4	4
*Wind Direction	N-E	N-E	N-E	N-E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

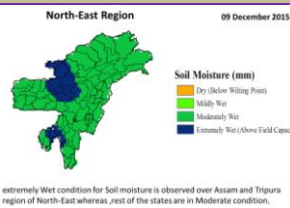
The temperature range for maximum and minimum were 21.4-25.1°C and 11.9-14.4°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 75-80% & minimum of 35-40%. Rainfall recorded for the past three days is **000.00mm.** (Source-mosdac.gov.in)

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-24°C and 5-6°C. Maximum relative humidity is expected in the range of 65-93% and minimum may from 23-26%. Wind direction would be northeasterly to easterly with the wind speed of 4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

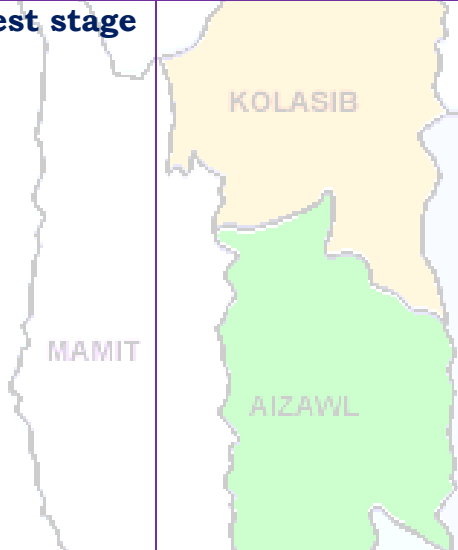
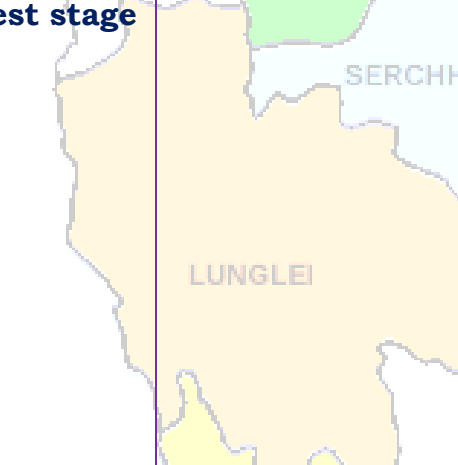


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal / Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Saiha

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	24	24	24	24	23
Min Temp (°C)	6	6	5	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	65	68	71	66	93
Min RH (%)	23	25	26	23	24
Wind Speed (Kmph)	4	4	4	4	4
*Wind Direction	N-E	N-E	N-E	N-E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

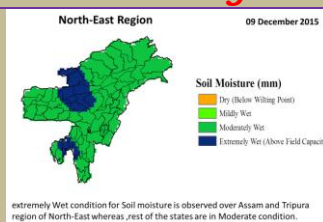
December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 21.4-25.1°C leh a vawh lai berin 11.9-14.4°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 75-80% leh a hniam lai 35-40% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23-24°C a ni ang a. A vawh lai ber in 5-6°C ni tur ah beisei a ni. RH san lai berin 65-93% leh a hniam lai berin 23-26% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawh tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawh tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawng lek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtah a par nasat lain urea chu 70g a pek tur.
Bawrsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhu tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawnggek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. • A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun		2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA
ICAR RESEARCH COMPLEX FOR NEH REGION
 Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Serchhip

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	22	22
Min Temp (°C)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	20	22	25	22	22
Wind Speed (Kmph)	2	2	2	4	4
*Wind Direction	E	N-E	N-E	N-E	E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
 Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

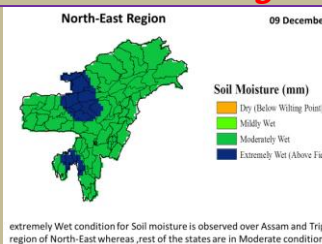
Weather summary of the past three days

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 22-23°C and 5-6°C. Maximum relative humidity is expected in the range of 100% and minimum may from 20-25%. Wind direction would be northeasterly to easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

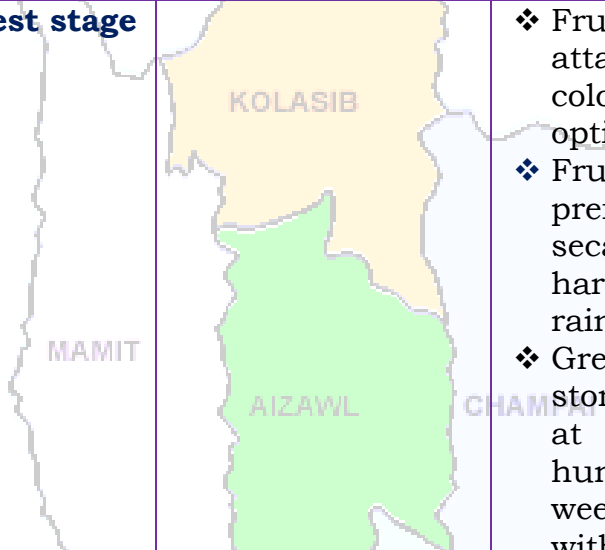
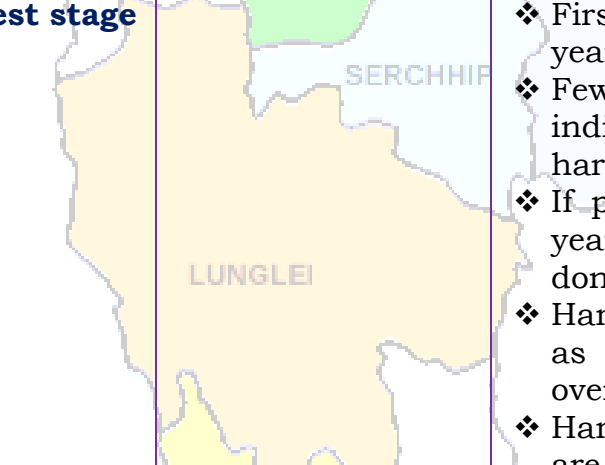


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	plant the seedlings on ridges. ❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	SATHA	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage	KOLASIB MAMIT	❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		Mustard sawfly	❖ Application of carbofuran 3G @ 100g/m ² in nursery is quite effective.
Mustard and toria	Sowing	SERCHHIP LUNGLEI	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the

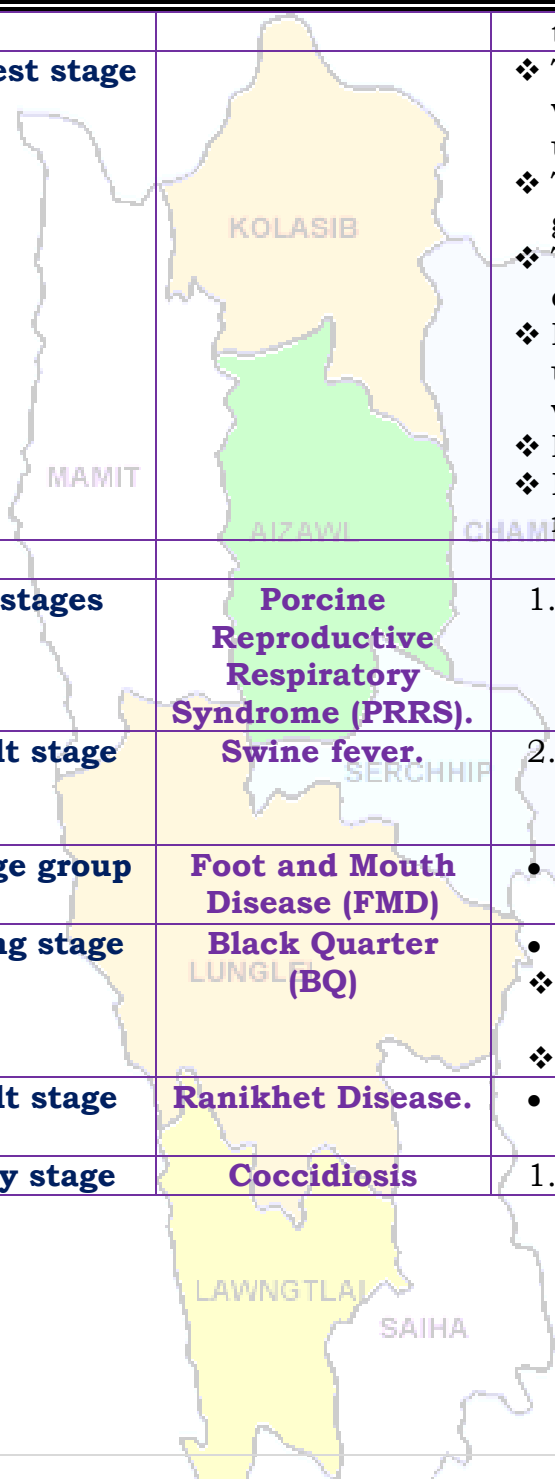


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Ginger and turmeric	Harvest stage		time of sowing ❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Serchhip

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	22	22
Min Temp (°C)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	20	22	25	22	22
Wind Speed (Kmph)	2	2	2	4	4
*Wind Direction	E	N-E	N-E	N-E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

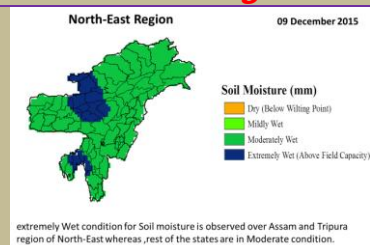
Ni thum kaltha sik leh sa dinhmun tlangpui

December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 22-23°C a ni ang a. A vawh lai ber in 5-6°C ni tur ah beisei a ni. RH san lai berin 100% leh a hniam lai berin 20-25% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
		LAWNGTLAI	



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	- A chi tha leh khat tha chauh hman tur. - Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



District: Aizawl

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	23	23	23	22	22
Min Temp (oC)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	97	98	98	98	99
Min RH (%)	27	26	29	27	28
Wind Speed (Kmph)	3	2	2	3	4
*Wind Direction	E	E	E	E	E

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E,
Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

**Ni thum kaltha sik leh sa
dinhmun tlangpui**

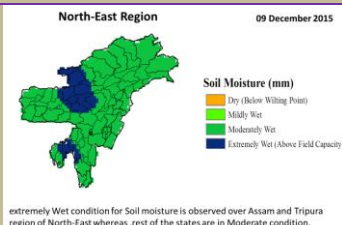
**December 23, 2015 atanga December 27,
2015 sik leh sa dinhmun hmuhlawk dan**

Khua a lum lai berin 16.1-19.8°C leh a vawh lai berin 5.1-9.3°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 74-90% leh a hniam lai 38-50% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. (Source- **Mosdac.gov.in**)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 22-23°C a ni ang a. A vawh lai berin 5-6°C ni tur ah beisei a ni. RH san lai berin 97-99% leh a hniam lai berin 27-29% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih vele nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak baw tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that baw tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam baw ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur. bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride 4g + Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		MAMIT	
		AIZAWL	Blister beetle • Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		LAWNGTLAI	Aphids • Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		SAIHA	Epilachna beetle • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	beetle a veng thei - A chi tha leh khat tha chauh hman tur. - Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Aizawl

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	22	22
Min Temp (°C)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	97	98	98	98	99
Min RH (%)	27	26	29	27	28
Wind Speed (Kmph)	3	2	2	3	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

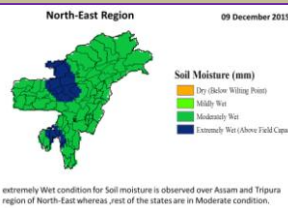
The temperature range for maximum and minimum were 16.1-19.8°C and 5.1-9.3°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 74-90% & minimum of 38-50%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 22-23°C and 5-6°C. Maximum relative humidity is expected in the range of 97-99% and minimum may from 27-29%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

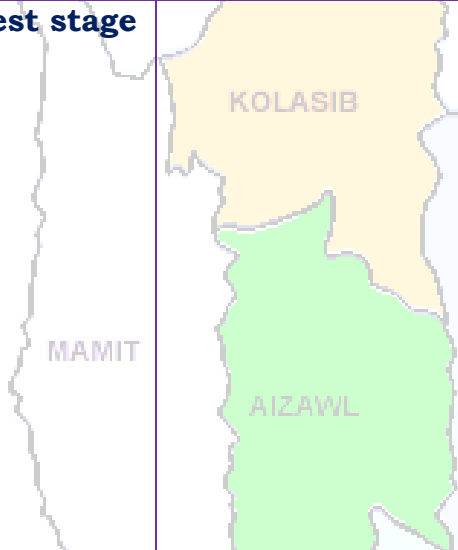
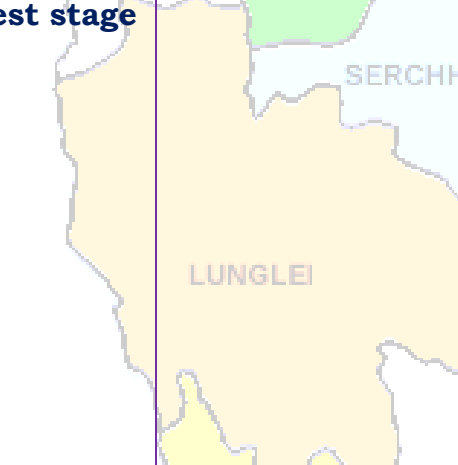


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Champhai

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	22	22	22	22	22
Min Temp (°C)	5	5	5	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	98	98	97	98
Min RH (%)	28	26	29	27	28
Wind Speed (Kmph)	3	3	3	4	4
*Wind Direction	S-E	S-E	S-E	S-E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

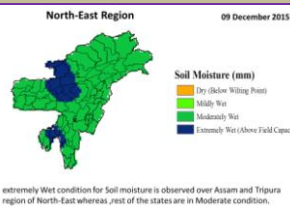
The temperature range for maximum and minimum were 20.1-25.2°C and 9.4-14.8°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 75-85% & minimum of 32-48%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 22°C and 5°C. Maximum relative humidity is expected in the range of 97-98% and minimum may from 27-28%. Wind direction would be southeasterly to easterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

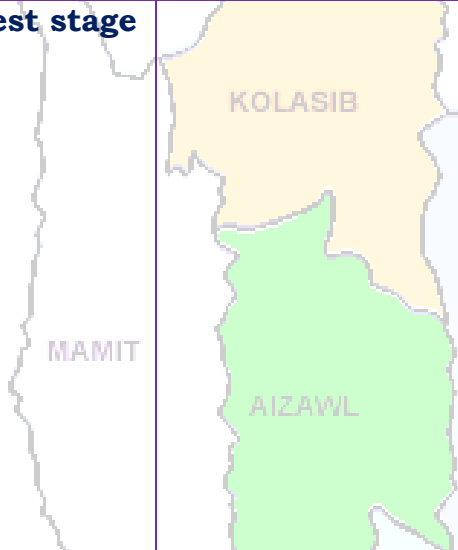
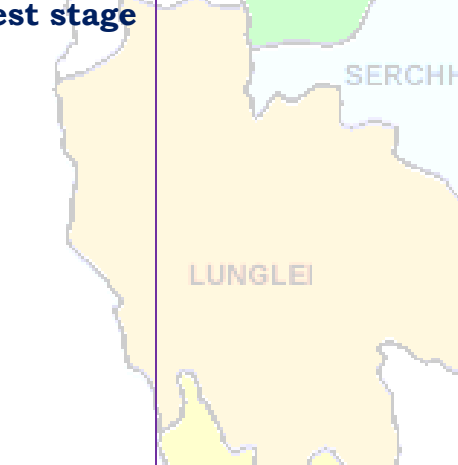


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Champhai

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	22	22	22	22	22
Min Temp (oC)	5	5	5	5	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	98	98	97	98
Min RH (%)	28	26	29	27	28
Wind Speed (Kmph)	3	3	3	4	4
*Wind Direction	S-E	S-E	S-E	S-E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

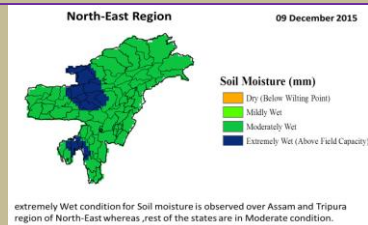
December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 20.1-25.2^oC leh a vawh lai berin 9.4-14.8^oC ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 75-85% leh a hniam lai 32-48% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. (Source- **Mosdac.gov.in**)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 22^oC a ni ang a. A vawh lai ber in 5^oC ni tur ah beisei a ni. RH san lai berin 97-98% leh a hniam lai berin 27-28% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 3-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih vele nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		MAMIT	
		AIZAWL	Blister beetle
		CHAMPAI	
Bawkbawn	A chin dan	SERCHHIP	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur • Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		LAWNGTLAI	Aphids
		SAIHA	
			Epilachna beetle



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	beetle a veng thei - A chi tha leh khat tha chauh hman tur. - Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Kolasib

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/English

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	23	23
Min Temp (°C)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	96	95	96
Min RH (%)	29	26	30	28	29
Wind Speed (Kmph)	4	2	2	3	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

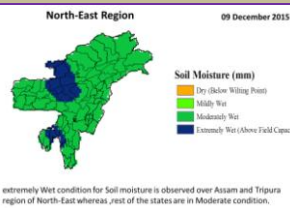
The temperature range for maximum and minimum were 16.3-19.8°C and 4.1-9.3°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 74-86% & minimum of 31-45%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 23rd December, 2015 To 27th December, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23°C and 5-6°C. Maximum relative humidity is expected in the range of 95-99% and minimum may from 26-30%. Wind direction would easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

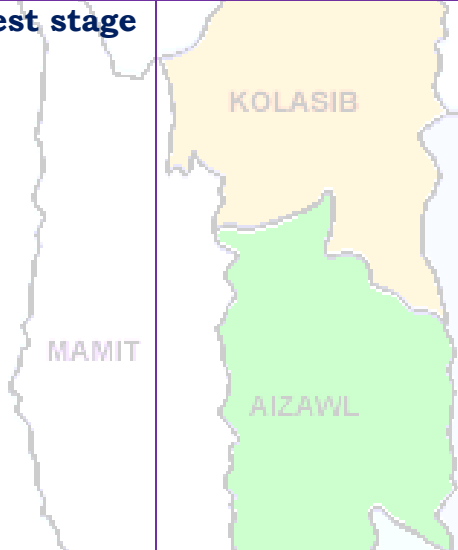
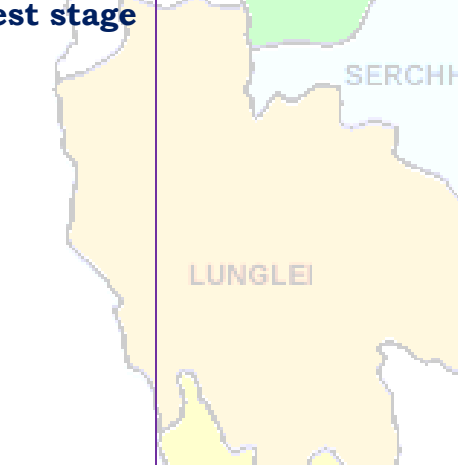


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal / Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Kolasib

Period: 23 – 27 December, 2015

Bulletin No: -574/2015/ Bulletin/Mizo

Date of issue: 22nd December, 2015

Parameters	23.12.2015	24.12.2015	25.12.2015	26.12.2015	27.12.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (°C)	23	23	23	23	23
Min Temp (°C)	6	6	6	6	5
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	96	95	96
Min RH (%)	29	26	30	28	29
Wind Speed (Kmph)	4	2	2	3	4
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

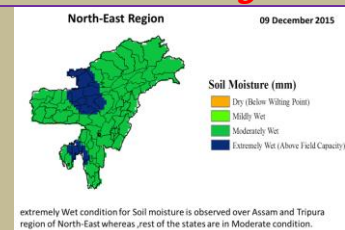
December 23, 2015 atanga December 27, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 16.3-19.8°C leh a vawh lai berin 4.1-9.3°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 74-86% leh a hniam lai 31-45% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 23°C a ni ang a. A vawh lai ber in 5-6°C ni tur ah beisei a ni. RH san lai berin 95-99% leh a hniam lai berin 26-30% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 00.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hniph chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawh tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawh tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla $\frac{3}{4}$ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. - A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun		2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Aizawl

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (oC)	22	22	22	22	22
Min Temp (oC)	7	7	6	6	6
Cloud Coverage	Mainly clear	Mainly clear	Clear sky	Clear sky	Mainly clear
Max RH (%)	97	99	100	99	97
Min RH (%)	44	41	35	34	28
Wind Speed (Kmph)	2	4	4	3	3
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

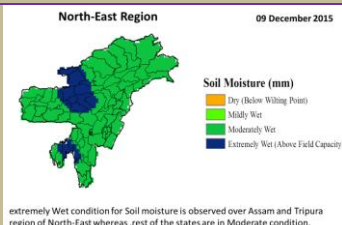
December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 18.1-20.8°C leh a vawh lai berin 7.1-10.3°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 85-91% leh a hniam lai 41-52% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. (Source- **Mosdac.gov.in**)

Ni 2 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 22°C a ni ang a. A vawh lai berin 6-7°C ni tur ah beisei a ni. RH san lai berin 97-100% leh a hniam lai berin 28-44% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 3-5 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 05.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih vele nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		MAMIT	
		AIZAWL	Blister beetle
		CHAMPAI	
Bawkbawn	A chin dan	SERCHHIP	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur • Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		LAWNGTLAI	Aphids
		SAIHA	
			Epilachna beetle



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	beetle a veng thei - A chi tha leh khat tha chauh hman tur. - Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. - Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	- A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. - Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		- Lei chu vawi 2/3 laihphut phawt tur. - A chi chu a line indawt a chin tur - A chi chu kg khatah Thiram 4g a chiah tur. - Hectare khatah buh chi chu 20-25kg hman tur. - Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lei chu boruak kal that nan laihphut thin tur. - Nitrogen leitha chu an mamawh taw kanga pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA
ICAR RESEARCH COMPLEX FOR NEH REGION
 Mizoram Centre, Kolasib- 796081, MIZORAM
(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Aizawl

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	22	22	22	22	22
Min Temp (°C)	7	7	6	6	6
Cloud Coverage	Mainly clear	Mainly clear	Clear sky	Clear sky	Mainly clear
Max RH (%)	97	99	100	99	97
Min RH (%)	44	41	35	34	28
Wind Speed (Kmph)	2	4	4	3	3
*Wind Direction	E	E	E	E	E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

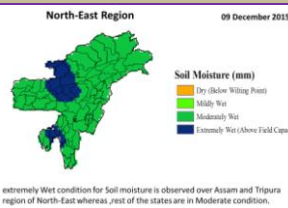
The temperature range for maximum and minimum were 18.1-20.8°C and 7.1-10.3°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 85-91% & minimum of 41-52%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There are chances of light rainfall during the next 2 day. The maximum and minimum temperatures for the next 5 days may range for 22°C and 6-7°C. Maximum relative humidity is expected in the range of 97-100% and minimum may from 28-44%. Wind direction would be easterly with the wind speed of 3-5 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 05.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

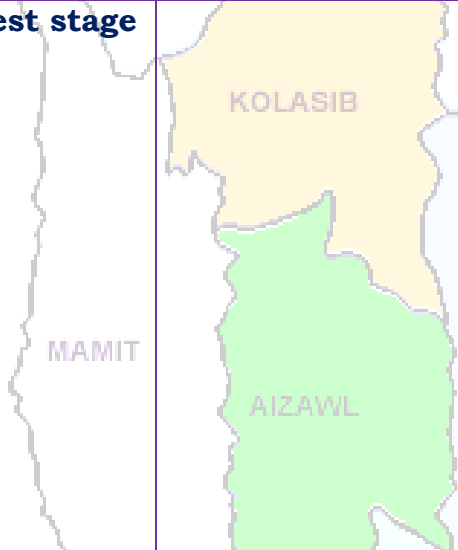
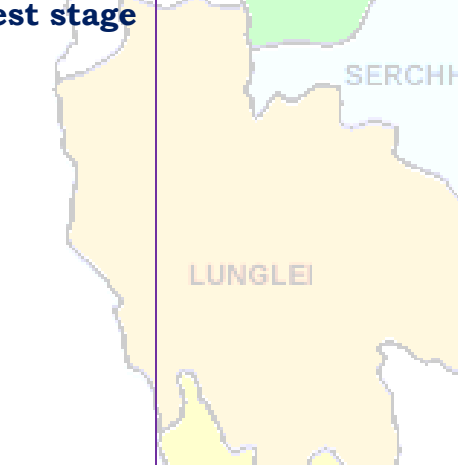


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal / Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Champhai

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	22	22	22	21	22
Min Temp (°C)	6	6	7	7	7
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	99	99	99	99
Min RH (%)	56	43	36	38	29
Wind Speed (Kmph)	3	3	4	4	3
*Wind Direction	S-E	S-E	S-E	S-E	S-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

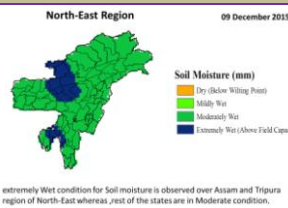
The temperature range for maximum and minimum were 19.1-24.2°C and 8.4-12.8°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 74-78% & minimum of 38-51%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There are chances of light rainfall during the next 2 day. The maximum and minimum temperatures for the next 5 days may range for 21-22°C and 6-7°C. Maximum relative humidity is expected in the range of 96-99% and minimum may from 29-56%. Wind direction would be southeasterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 05.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

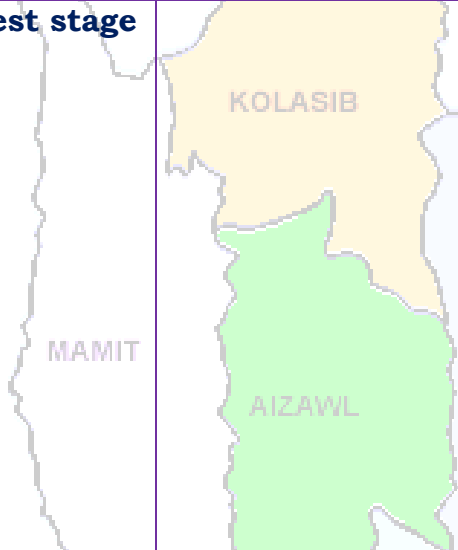
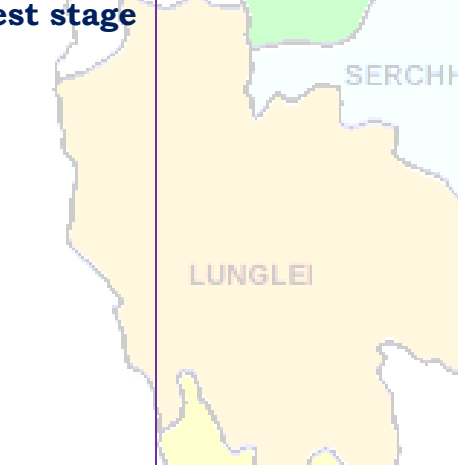


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
		SERCHHIP	
Pea	Sowing	LUNGLEI	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
		LAWNGTLAI	
Ginger and turmeric	Harvest stage	SAIHA	❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Champhai

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (oC)	22	22	22	21	22
Min Temp (oC)	6	6	7	7	7
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	99	99	99	99
Min RH (%)	56	43	36	38	29
Wind Speed (Kmph)	3	3	4	4	3
*Wind Direction	S-E	S-E	S-E	S-E	S-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

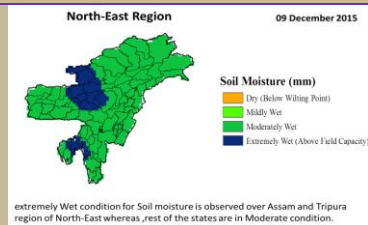
December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 19.1-24.2°C leh a vawh lai berin 8.4-12.8°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 74-78% leh a hniam lai 38-51% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 2 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 21-22°C a ni ang a. A vawh lai berin 6-7°C ni tur ah beisei a ni. RH san lai berin 96-99% leh a hniam lai berin 29-56% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 3-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 05.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih vele nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngkek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuah tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		MAMIT	
		AIZAWL	Blister beetle
		CHAMPAI	
Bawkbawn	A chin dan	SERCHHIP	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur • Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		LAWNGTLAI	Aphids
		SAIHA	
			Epilachna beetle



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Buh	Nursery stage	Pre kharif rice	beetle a veng thei • A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Thrips	Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Kolasib

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	22	22	22	21	22
Min Temp (°C)	6	6	7	7	7
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	99	99	99	99
Min RH (%)	56	43	36	38	29
Wind Speed (Kmph)	3	3	4	4	3
*Wind Direction	S-E	S-E	S-E	S-E	S-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Weather summary of the past three days

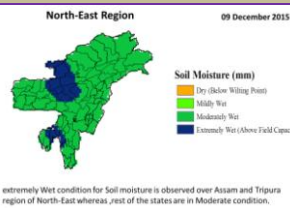
The temperature range for maximum and minimum were 17.3-19.1°C and 7.1-12.3°C respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 75-88% & minimum of 34-48%. Rainfall recorded for the past three days is **000.00mm.** (Source- mosdac.gov.in)

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There are chances of light rainfall during the next 2 day. The maximum and minimum temperatures for the next 5 days may range for 21-22°C and 6-7°C. Maximum relative humidity is expected in the range of 96-99% and minimum may from 29-56%. Wind direction would easterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 05.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.

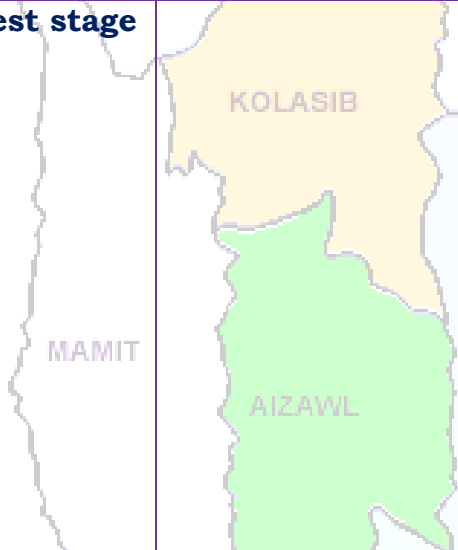
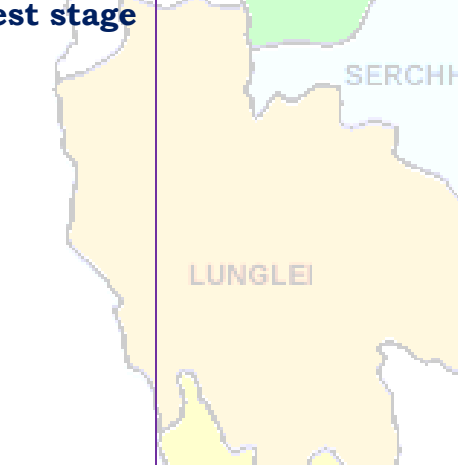


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal / Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Chilli	Transplant stage	KOLASIB	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	AIZAWL	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	SERCHHIP	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LUNGLEI	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and five pickings in pole type.
Cowpea	Harvest stage	LAWNGTLAI	❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cole crop	Card formation stage	KOLASIB	varieties. ❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
		MAMIT	
Mustard and toria	Sowing	Mustard sawfly AIZAWL SERCHHIP	✚ Application of carbofuran 3G @ 100g/m² in nursery is quite effective. ❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	LUNGLEI LAWNGTLAI SAIHA	❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Kolasib

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	22	22	22	21	22
Min Temp (°C)	6	6	7	7	7
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	96	99	99	99	99
Min RH (%)	56	43	36	38	29
Wind Speed (Kmph)	3	3	4	4	3
*Wind Direction	S-E	S-E	S-E	S-E	S-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

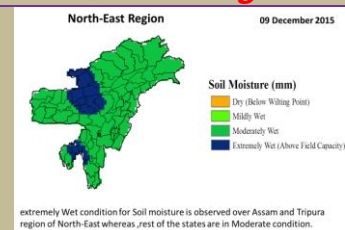
December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Khua a lum lai berin 17.3-19.1°C leh a vawh lai berin 7.1-12.3°C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 75-88% leh a hniam lai 34-48% ani ang. Ni 3 kal ta chung a ruah tla zatchu **000.00mm** ani. (Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 21-22°C a ni ang a. A vawh lai berin 6-7°C ni tur ah beisei a ni. RH san lai berin 86-99% leh a hniam lai berin 29-56% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 3-4 km ni tur a beisei niin. Ni nga chung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 05.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih vele nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlath a chin tur. A rawn chaw chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzath theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak baw tur. • Leitha chu thlai pakhat 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that baw tur. • Oil palm rah chu a puitlin hunah te, a rawng inhlath



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla $\frac{3}{4}$ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang.
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			- Leitha chu thlai pakhat ah 60:50:60g a pek tur. - Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		- Ni 7 danah tui chu tha taka pek tur. - Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. - Thlai pakhtatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	A chin dan	1. Nursery tihfai a tui tlem pektur. 2. Phunsawn hnuah tui tha taka pek tur.	- A kung bulthut ah hnim chheh darh tur. - A khat tawkin tui pek tur. - A tiak phunsawn te chu nil eh ruah lakah hliahkhu tur.
		1. Aphids	- Surf tuiin thlai chu kah tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	- Pangang tui leh a puitling te chu a kung atangin thin thlak tur. - Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial wilt chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	- Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah wawi 2/3 kah thin tur. - Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai		Bean hnah, a tang ro leh hnim



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	SERCHHIP	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawnggek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids LUNGLEI	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice LAWNGTLAI SAIHA	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		Raised bed method	chu chiah tur. • A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhinh kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhinh kah tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun		2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lawngtlai

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/English

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	21	21	22	22	23
Min Temp (°C)	9	9	6	6	6
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	86	92	91	86	63
Min RH (%)	48	42	31	32	21
Wind Speed (Kmph)	4	5	5	5	5
*Wind Direction	N-E	N-E	N-E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

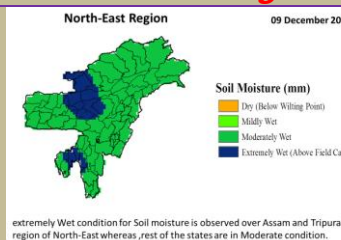
Weather summary of the past three days

Weather forecast valid from 19th December, 2015 To 23rd December, 2015.

There are chances of light rainfall during the next 2 days. The maximum and minimum temperatures for the next 5 days may range for 21-23°C and 6-9°C. Maximum relative humidity is expected in the range of 63-92% and minimum may from 21-48%. Wind direction would be northeasterly with the wind speed of 4-5 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 05.0 mm

NDVI for Mizoram



NDVI of soil moisture for Mizoram is moderate wet condition.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Harvest stage		❖ Fruits are harvested when they attain full size, develop attractive colour from green to yellow with optimum sugar and acid blend. ❖ Fruits should be harvested preferably with clipper, shears or secateurs. Oranges should not be harvested in wet weather or during rains. ❖ Green or fully ripe fruits can be stored in evaporative cool chamber at 8-10°C & 90-95% relative humidity for a period of three weeks after post-harvest treatment with Bavistin (1000 ppm.).
Oil plam	Harvest stage		❖ First harvest can be done 3.5 to 4 years after planting. ❖ Few ripe fruits are loose/fall off indicates the bunch is ready for harvest. ❖ If palms become taller (from 10th year onwards), then harvesting is done by hook. ❖ Harvesting rounds should be made as frequent as possible to avoid over ripening of bunches. ❖ Harvesting rounds of 10-12 days are generally practiced
Banana	Flower/Harvest stage		❖ Cleaning near base of the plant and cut unwanted branches. ❖ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ❖ Apply micro-nutrients viz. zinc,



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard for fruit bearing plant. ❖ Colour change from green to light yellow and cone will be smooth. ❖ Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. ❖ The fruit is climacteric and can reach consumption stage after ripening operation.
		Comb weevil and stem weevil	❖ Applications of neem powder effectively controlled weevils. ❖ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ❖ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
Brinjal	Transplant stage		❖ Brinjal is planted in well pulverized and leveled field. ❖ Brinjal is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Chilli	Transplant stage	KOLASIB MAMIT AIZAWL CHAMPHAI	❖ Chilli is planted in well pulverized and leveled field. ❖ Chilli is normally planted in raised beds of 60 to 75 cm width. ❖ The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. ❖ In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges.
Tomato	Flowering stage	SERCHHIP	❖ Weeding near the plant ❖ Fertilizer application in split dose of recommended dose. ❖ Provide irrigation in the plant.
Pineapple	Gap filling stage	LUNGLEI	❖ Double row planting is done by alternating two rows of crops by a wider mound or path. ❖ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	Harvest stage	LAWNGTLAI SAIHA	❖ First harvest will be obtained after 55-60 days in bushy cultivars and 60 days in pole type ❖ French bean are harvested when pod are tender. ❖ Three pickings in bush type and

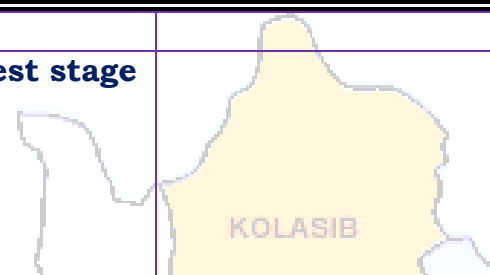
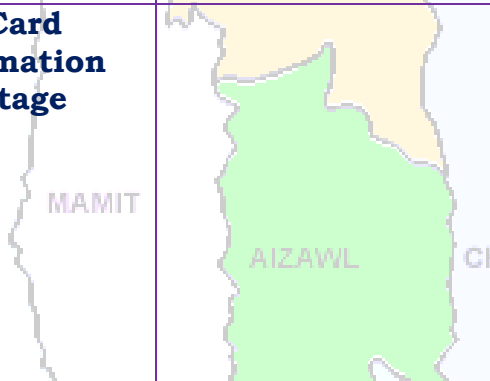
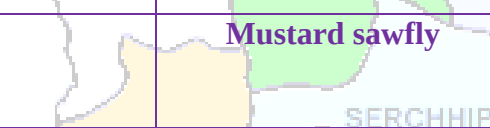
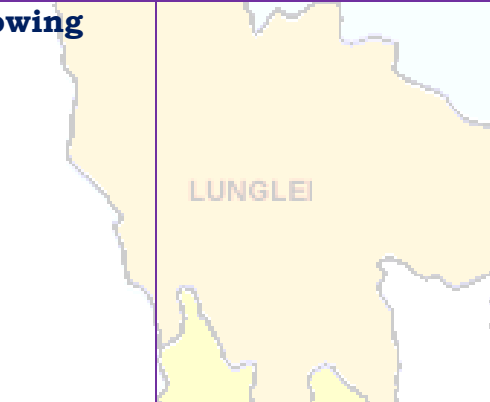
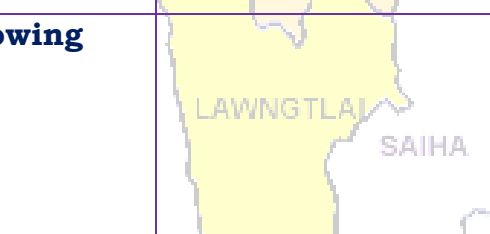


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Cowpea	Harvest stage		five pickings in pole type. ❖ First harvest will be obtained after 50 days in pole type ❖ Cowpea are harvested when pod are partially mature. ❖ Minimum five picking will be early varieties.
Cole crop	Card formation stage		❖ Intercultural operations should be done regularly to keep the crop free from weeds and aeration of the root system. ❖ Remaining quantity of nitrogen is applied 30-40 days after transplanting. ❖ Provide irrigation if water is require.
			Mustard sawfly ❖ Application of carbofuran 3G @ 100g/m² in nursery is quite effective.
Mustard and toria	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing		❖ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kept overnight for soaking. ❖ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Ginger and turmeric	Harvest stage		❖ Turmeric and ginger is harvested when leaves start yellowing and ultimately the stem dries down. ❖ The plants are-cut close to the ground. ❖ The crop is irrigated lightly for easy digging. ❖ Harvesting consists of digging of underground clumps of rhizomes with ❖ Pick axe or digging fork. ❖ Fingers are separated from mother rhizomes.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



District: Lawngtlai

Period: 19 – 23 December, 2015

Bulletin No: -573/2015/ Bulletin/Mizo

Date of issue: 18th December, 2015

Parameters	19.12.2015	20.12.2015	21.12.2015	22.12.2015	23.12.2015
Rainfall (mm)	3	2	0	0	0
Max Temp (°C)	21	21	22	22	23
Min Temp (°C)	9	9	6	6	6
Cloud Coverage	Partially clear	Clear sky	Clear sky	Clear sky	Mainly clear
Max RH (%)	86	92	91	86	63
Min RH (%)	48	42	31	32	21
Wind Speed (Kmph)	4	5	5	5	5
*Wind Direction	N-E	N-E	N-E	N-E	N-E

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.

STATUS OF MONSOON- November 1-30, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 44.8mm (00.0mm)	Champhai- 35.9mm (00.0mm)	Saiha- 64.9 mm (00.0mm)	Kolasib- 34.8mm (00.8mm)
Lawngtlai-54.1mm (00.0mm)	Lunglei-33.3mm (00.0mm)	Mamit-17.9mm (00.0mm)	Serchhip-56.3mm (00.0mm)

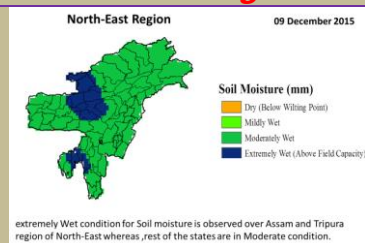
Ni thum kaltha sik leh sa dinhmun tlangpui

December 19, 2015 atanga December 23, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 2 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 21-23°C a ni ang a. A vawh lai ber in 6-9°C ni tur ah beisei a ni. RH san lai berin 63-92% leh a hniam lai berin 21-48% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 4-5 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni.

Weekly cumulative rainfall: 05.0mm

NDVI for Mizoram



NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Harvest stage		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngkek leitha chu a inzat theuha pawlhin pek tur. • Bawngkek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paihfai zel tur. • Thlai chu hrisel taka enkawl tur.
Oil palm	Harvest stage		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhat ah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur. - Balhla kung bul chu tihfai a a zar thlak bawk tur. - Leitha chu thlai pakhatath 600:200:100g a pek tur. - Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. - A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. - A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Balhla	Flower/Harvest stage		- A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur. - A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. - Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. - Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Sapthei	Transplant stage		- A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. - Chemical pek atangin ni 55-60 chhungin a par a chhuah thei
Lakhuihthei	A par lai		



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	A rah lai		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrh Saiabe	A chin dan	1. Nursery tihfai a tui tlem pek tur. 2. Phunsawn hnuah tui tha taka pek tur.	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.
		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			kah tur.
		3. Epilachna beetle	- A hnah a pangang leh a tui awm chu paihfai tur. - Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	- Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. - Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. - Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	- Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. - Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	- Dithane M-45 chu tui litre khatah 2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah wawi 2/3 kah tur. - Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	A par lai	KOLASIB	• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlh kah thin tur
Bawkbawn	A chin dan	MAMIT AIZAWL CHAMPAI SERCHHIP	• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlh leh tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	A chin dan	LUNGLEI	• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngkek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	Nursery stage	Pre kharif rice	• A chi tha leh khat tha chauh



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



		KOLASIB	hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		MAMIT AIZAWL CHAMPAI SERCHHIP LUNGLEI	Raised bed method • A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	A chin dan		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngkek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	Land preparation	LAWNGTLAI SAIHA	• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.
		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



			pawlhin kah tur.
		Scales	Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	Thla 16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	- Black Quarter Vaccine (BQ) - Thla ruk an tlin hunah vaccine lak tan tur. - Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	:	Research Associate (Mizo language Translator)	mamamralte@yahoo.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiantge	:	PC KVK, Lawngtlai	vv19@rediffmail.com kvklawngtalai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com