GRAMIN KRISHI 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: 18 – 22 November, 2015**

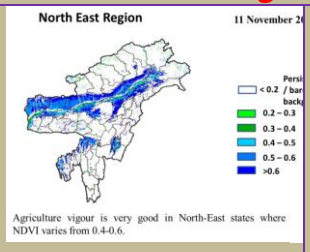
Bulletin No: -569/2015/ Bulletin/English **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	28	28	27	29	29
Min Temp (ºC)	9	11	10	10	9
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	99	96	96	99	99
Min RH (%)	37	35	39	35	31
Wind Speed (KmpH)	3	2	4	4	4
*Wind Direction	N-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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 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 27-29ºC and 9-11ºC. Maximum relative humidity is expected in the range of 96-99% and minimum may from 31-39%. Wind direction would be easterly to northeaterly 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Flowering/**		✚ Cleaning near base of the plant

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

	harvesting		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 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. - Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. - Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m^2) - Line sowing of seeds (7-10cm)

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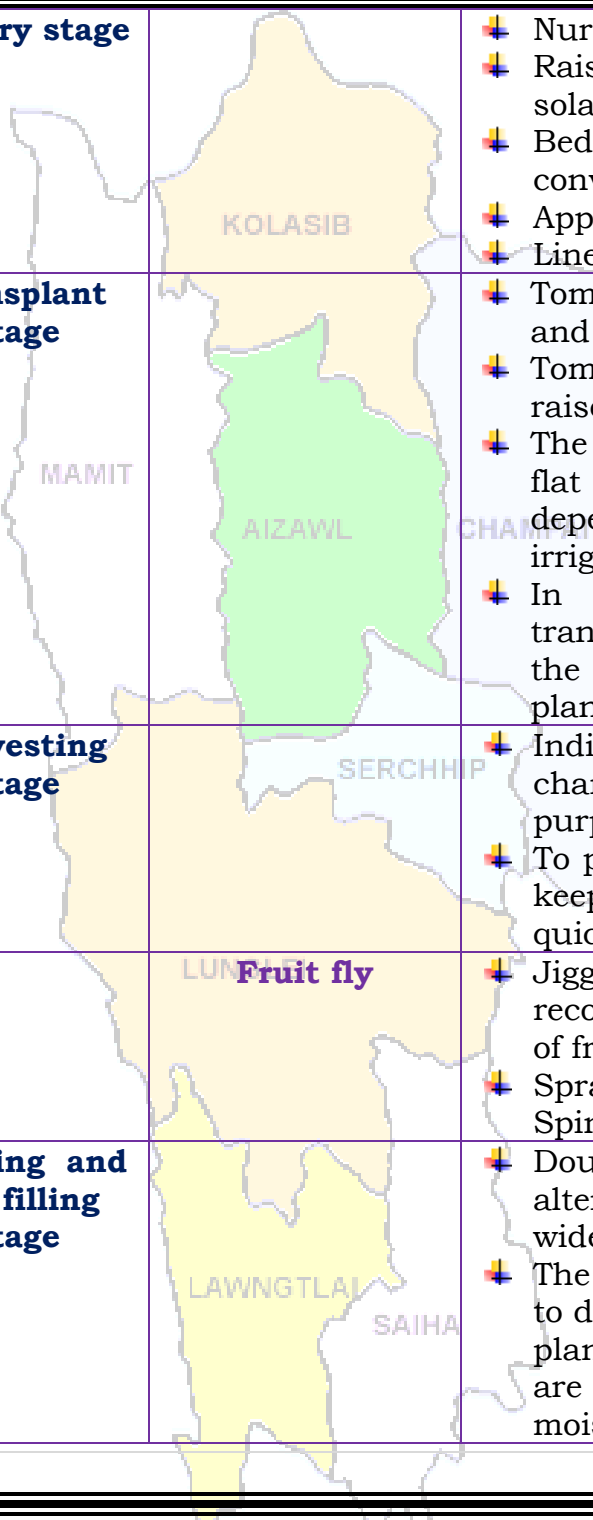
Chilli	**Nursery stage**		✦ Nursery preparation for tomato. ✦ Raised bed, nursery bed solarisation. ✦ Bed should be 1m width and conventional length. ✦ Application of FYM (1.5-2.0 kg/ m^2) ✦ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✦ Tomato is planted in well pulverized and leveled field. ✦ Tomato 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.
Passion Fruit	**Harvesting stage**		✦ Indication of fruit harvest will change colour green to slight purple. ✦ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✦ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✦ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✦ 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

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			season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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

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			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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome**	1. Culling of positive pigs or piglets.

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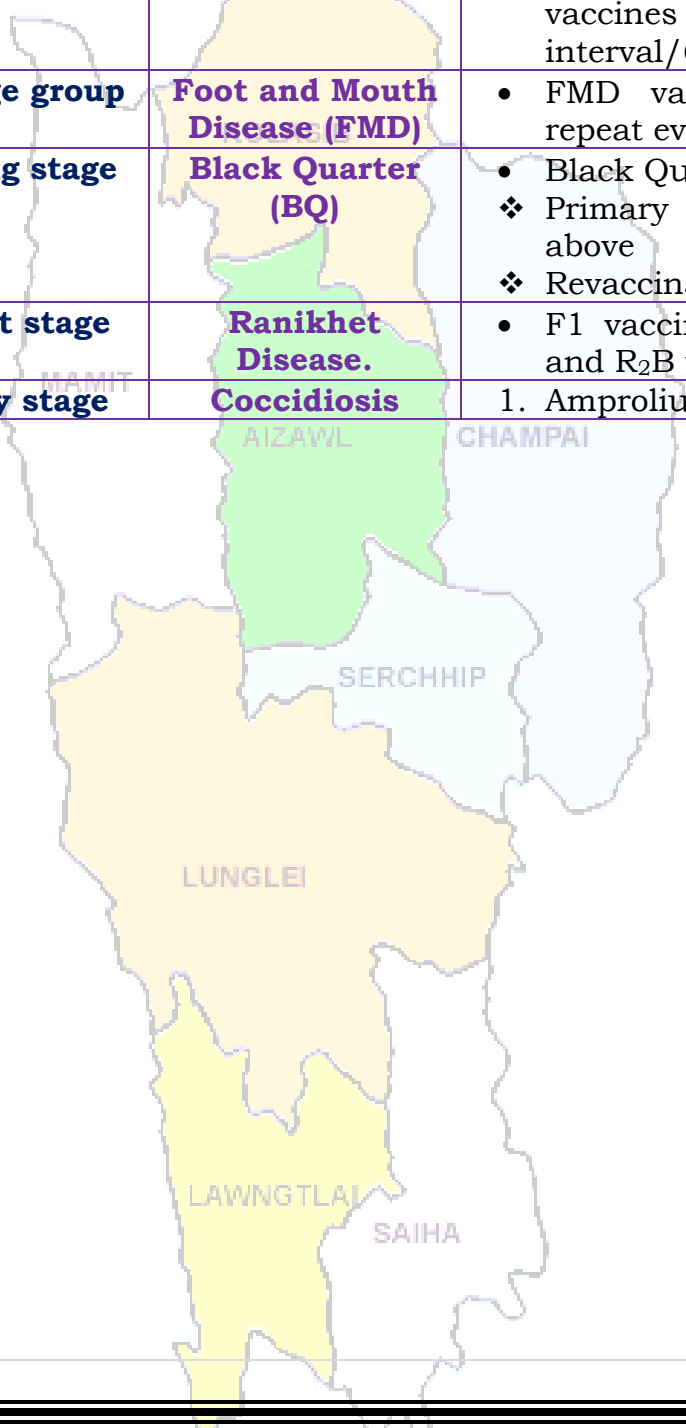
		(PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



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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. 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 kvknahthial@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	vvl9@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

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STATUS OF MONSOON- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

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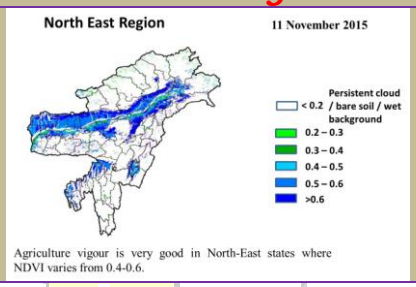
Ni thum kaltha sik leh sa dinhmun tlangpui	November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 27-29^{0}C a ni ang a.A vawh lai ber in 9-11^{0}C ni tur ah beisei a ni.RH san lai berin 96-99% leh a hniam lai berin 31-39% 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".

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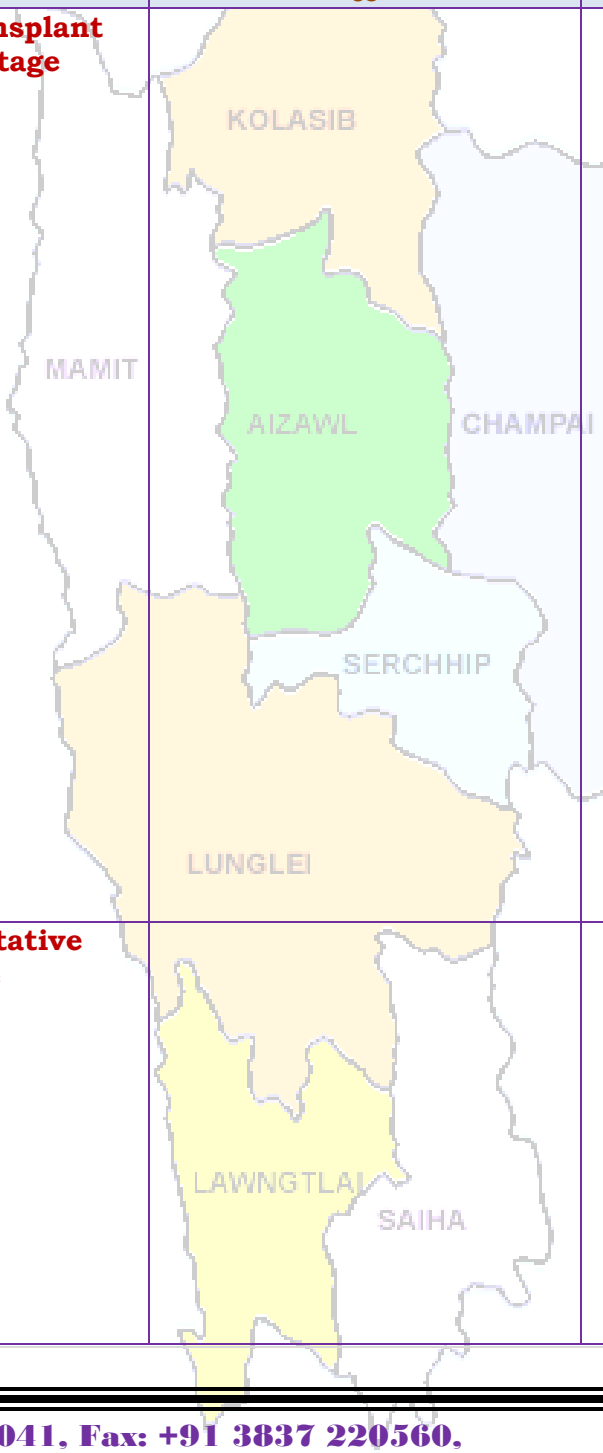
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi),

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		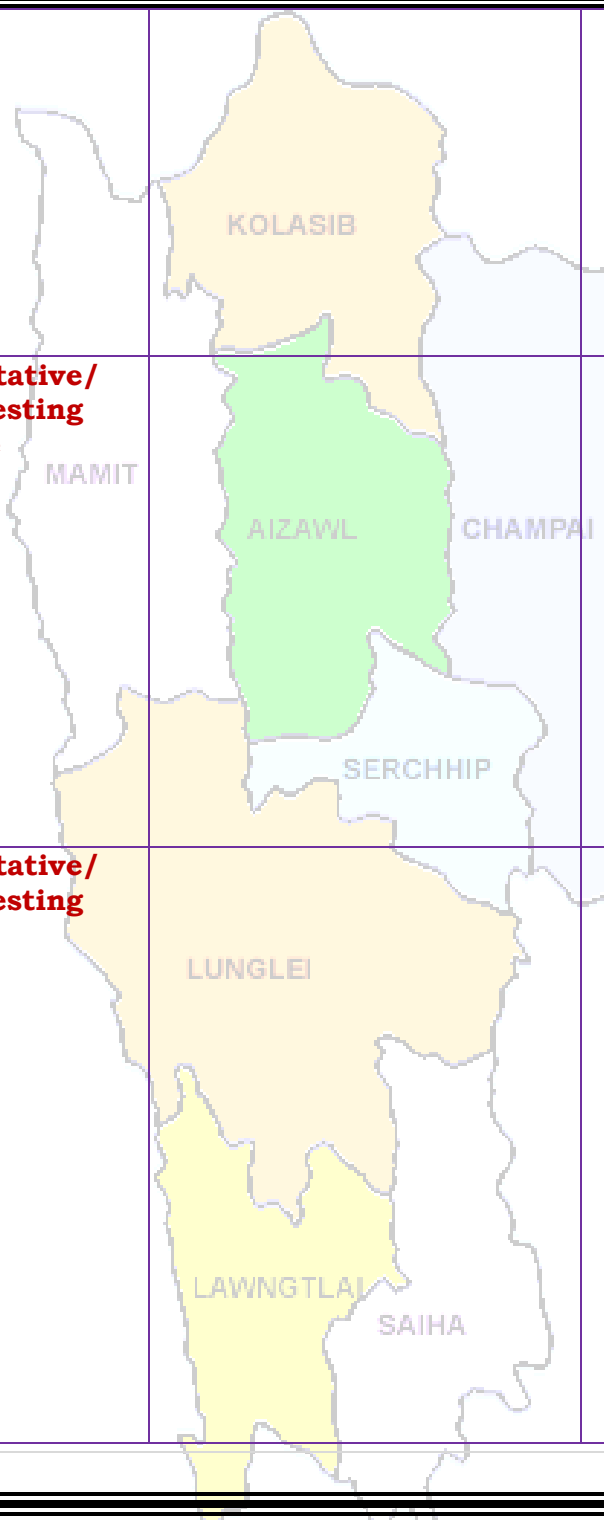	citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight, gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			tur.
Sapthei	**Nursery 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.
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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			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 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 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

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			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 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**		• 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.

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Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek 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
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. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N,

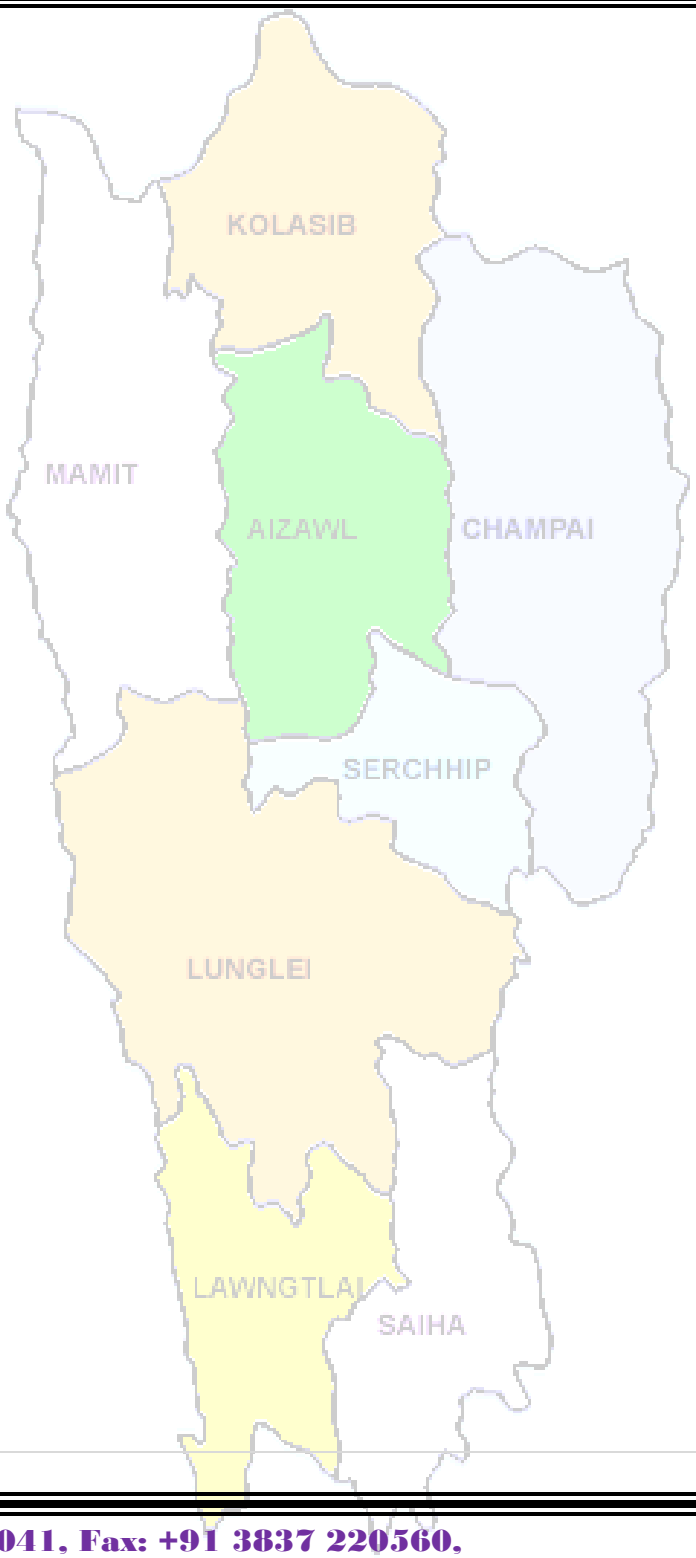
Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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.
		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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:** 18 – 22 November, 2015

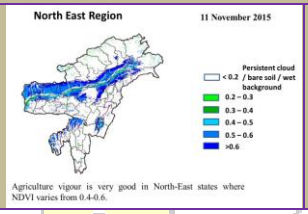
Bulletin No: -569/2015/ Bulletin/English **Date of issue:** 17th November, 2015

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	28	28	28	29	30
Min Temp (ºC)	11	13	11	11	10
Cloud Coverage	Partially clear	Partially clear	Mainly clear	Clear sky	Clear sky
Max RH (%)	100	93	96	100	99
Min RH (%)	42	41	43	40	33
Wind Speed (KmpH)	2	2	4	4	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

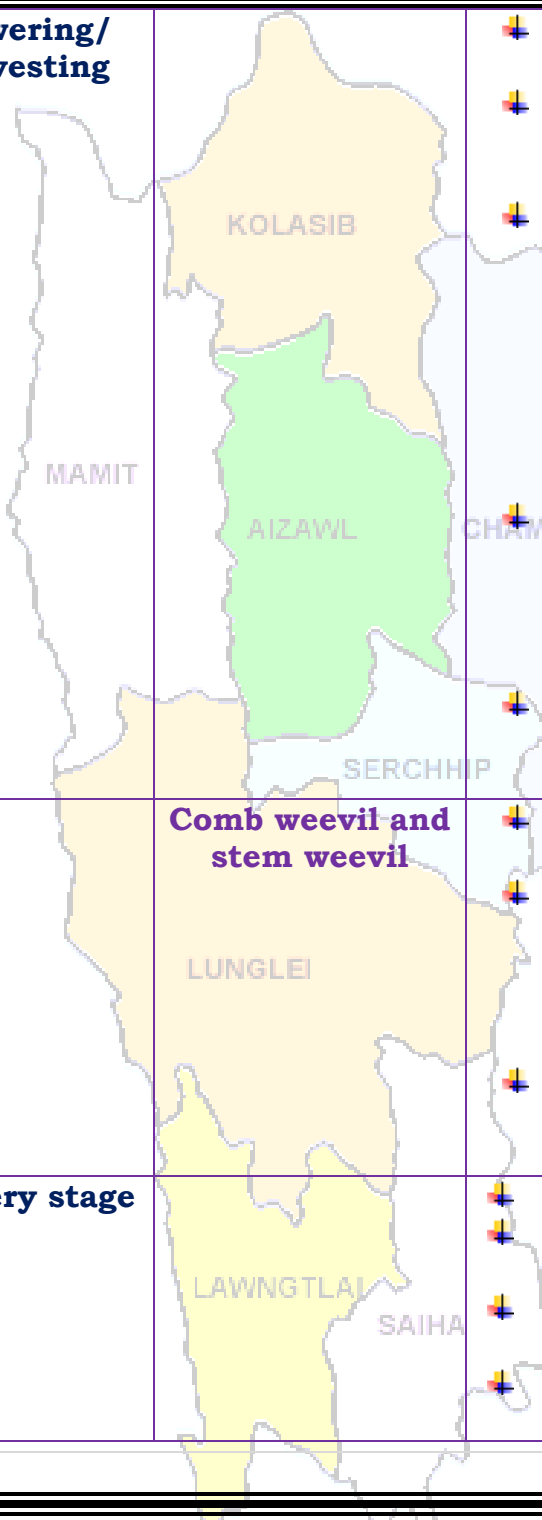
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 2015.
The temperature range for maximum and minimum were 24.3-26.8ºC and 17.1-18.9ºC respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 92-97% & minimum of 39-54%. Rainfall recorded for the past three days is **000.00mm. (Source-mosdac.gov.in)**	There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 28-30ºC and 10-13ºC. Maximum relative humidity is expected in the range of 93-100% and minimum may from 33-43%. Wind direction would be southeasterly 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Banana	**Flowering/ harvesting**		✚ 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 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. ✚ Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. ✚ Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		✚ Nursery preparation for tomato. ✚ Raised bed, nursery bed solarisation. ✚ Bed should be 1m width and conventional length. ✚ Application of FYM (1.5-2.0 kg/ m^2)

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			✓ Line sowing of seeds (7-10cm)
Chilli	**Nursery stage**		✓ Nursery preparation for tomato. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✓ Tomato is planted in well pulverized and leveled field. ✓ Tomato 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.
Passion Fruit	**Harvesting stage**		✓ Indication of fruit harvest will change colour green to slight purple. ✓ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✓ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✓ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✓ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			moisture is available as in rainy season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
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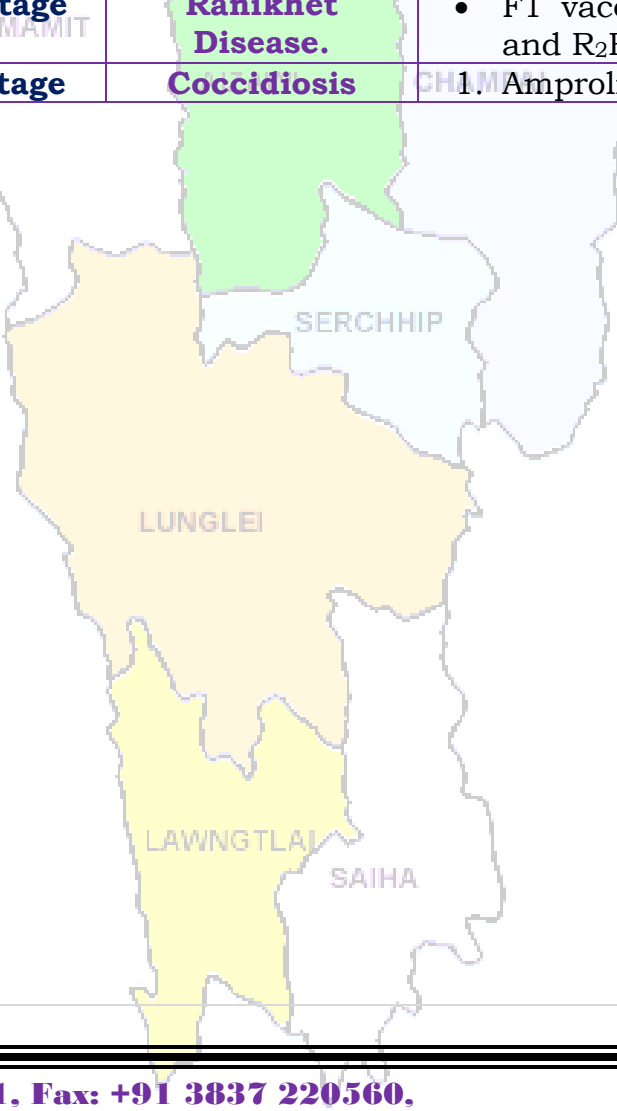
			✦ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	**Sowing**		✦ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		Syndrome (PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
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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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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(Prepared based on District wise Weather Forecast received from IMD, Guwahati)

District: Mamit **Period: 18 – 22 November, 2015**

Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

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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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

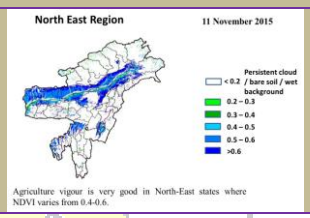
Khua a lum lai berin 24.3-26.8^{0}C leh a vawh lai berin 17.1-18.9^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 92-97% leh a hniam lai 39-54% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. **(Source- Mosdac.gov.in)**

November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 28-30^{0}C a ni ang a.A vawh lai ber in 10-13^{0}C ni tur ah beisei a ni.RH san lai berin 93-100% leh a hniam lai berin 33-43% 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



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Phone: +91 3837 220041, Fax: +91 3837 220560,
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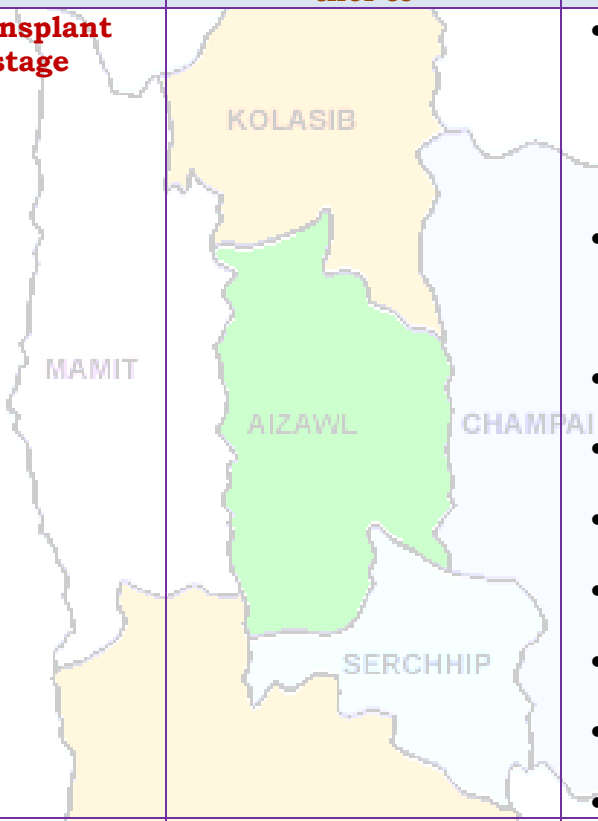
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			• 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.
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. • 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 hliahkhuh tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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 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	• Dithane M-45 chu tui litre khatah

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		blotch	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 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**		• 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**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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. • 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. • Bawngek 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 14 – 18 November, 2015**

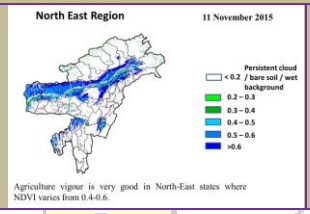
Bulletin No: -568/2015/ Bulletin/English **Date of issue: 13th November, 2015**

Parameters	14.11.2015	15.11.2015	16.11.2015	17.11.2015	18.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	27	28	26	29	29
Min Temp (ºC)	10	11	11	10	10
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	97	95	90	95	95
Min RH (%)	37	35	40	33	32
Wind Speed (KmpH)	4	3	4	4	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

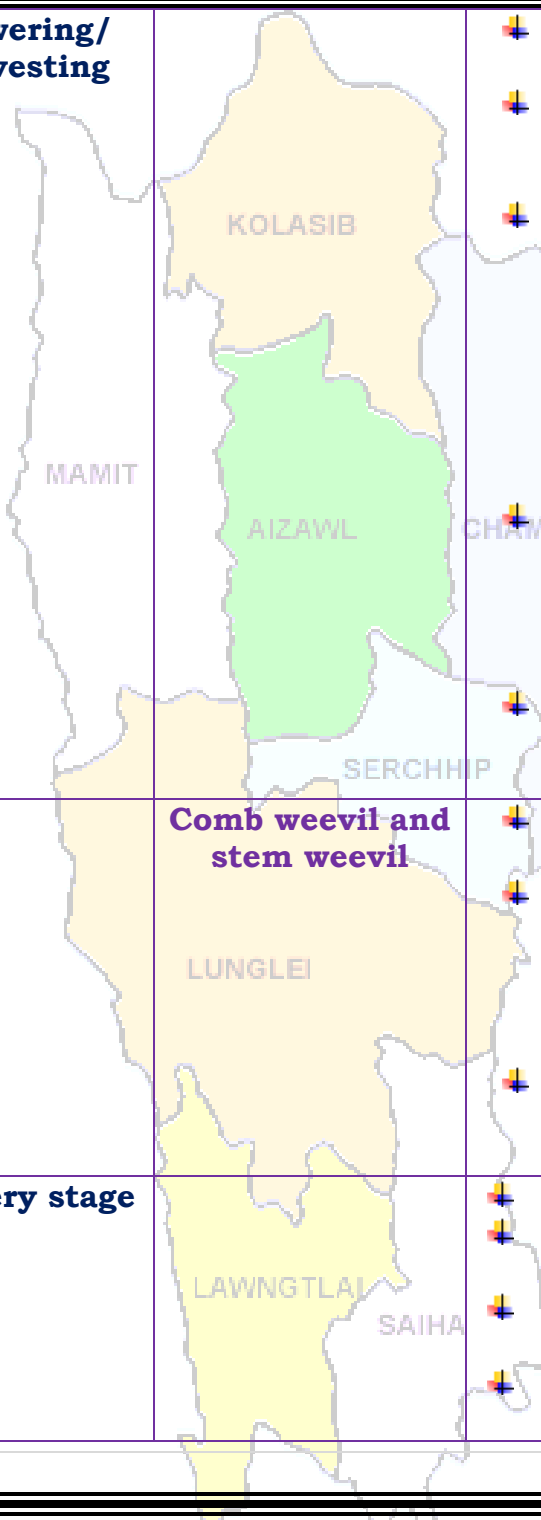
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 2015.
The temperature range for maximum and minimum were 27.4-29.8ºC and 17.9-18.4ºC respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 87-90% & minimum of 47-54%. Rainfall recorded for the past three days is **000.00mm. (Source-mosdac.gov.in)**	There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 26-29ºC and 10-11ºC. Maximum relative humidity is expected in the range of 90-97% and minimum may from 32-40%. 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Banana	**Flowering/ harvesting**		✚ 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 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. ✚ Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. ✚ Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		✚ Nursery preparation for tomato. ✚ Raised bed, nursery bed solarisation. ✚ Bed should be 1m width and conventional length. ✚ Application of FYM (1.5-2.0 kg/ m^2)

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			✓ Line sowing of seeds (7-10cm)
Chilli	**Nursery stage**		✓ Nursery preparation for tomato. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✓ Tomato is planted in well pulverized and leveled field. ✓ Tomato 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.
Passion Fruit	**Harvesting stage**		✓ Indication of fruit harvest will change colour green to slight purple. ✓ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✓ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✓ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✓ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

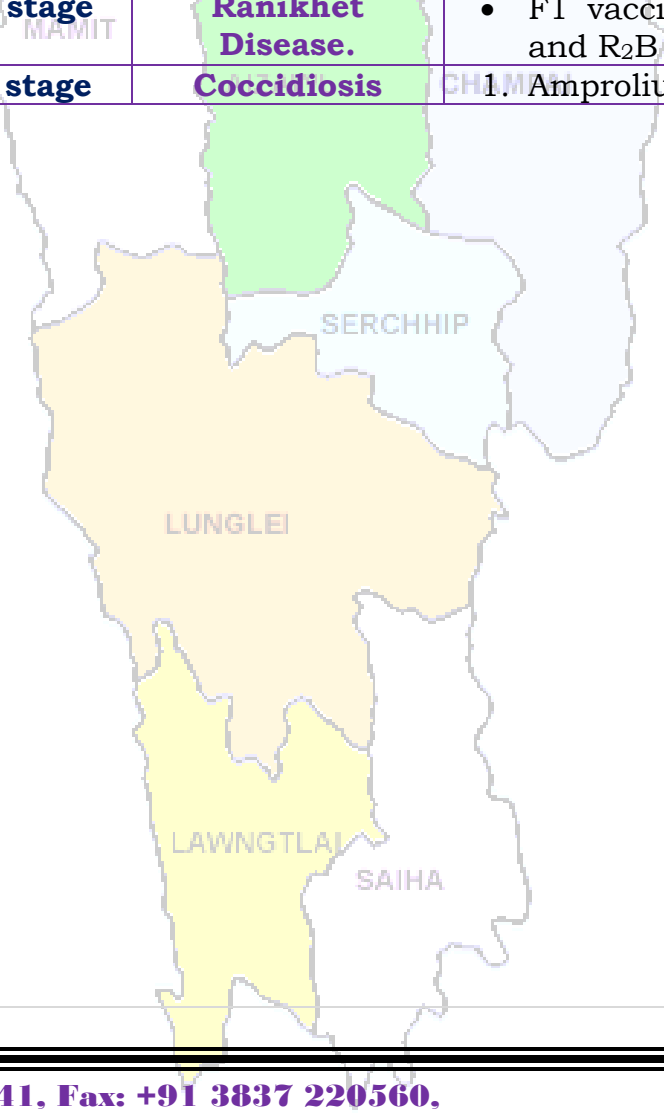
			moisture is available as in rainy season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			✦ 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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		Syndrome (PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	27	28	26	29	29
Min Temp (oC)	10	11	11	10	10
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	97	95	90	95	95
Min RH (%)	37	35	40	33	32
Wind Speed (KmpH)	4	3	4	4	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

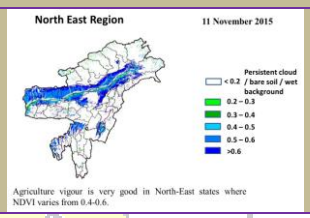
Khua a lum lai berin 27.4-29.8^{0}C leh a vawh lai berin 17.9-18.4^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 87-90% leh a hniam lai 47-54% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. **(Source- Mosdac.gov.in)**

November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 26-29^{0}C a ni ang a.A vawh lai ber in 10-11^{0}C ni tur ah beisei a ni.RH san lai berin 90-97% leh a hniam lai berin 32-40% 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.

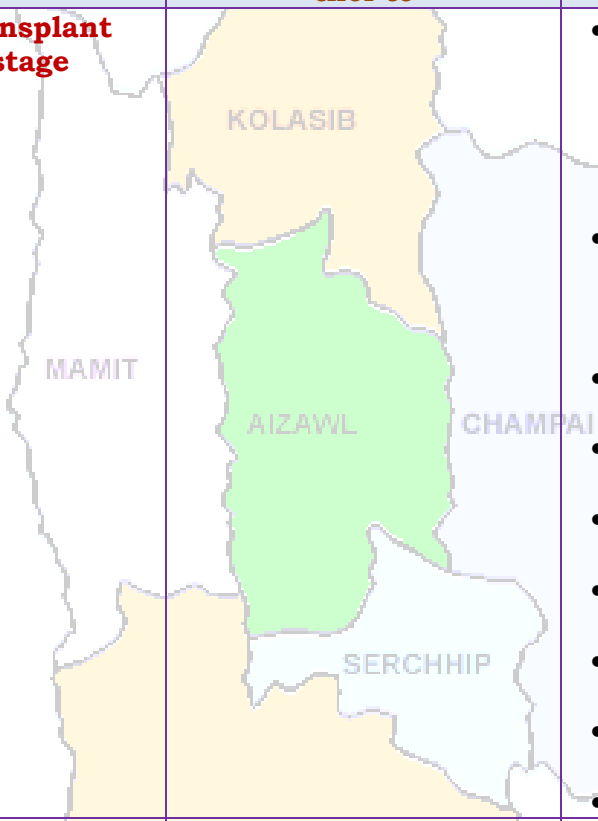
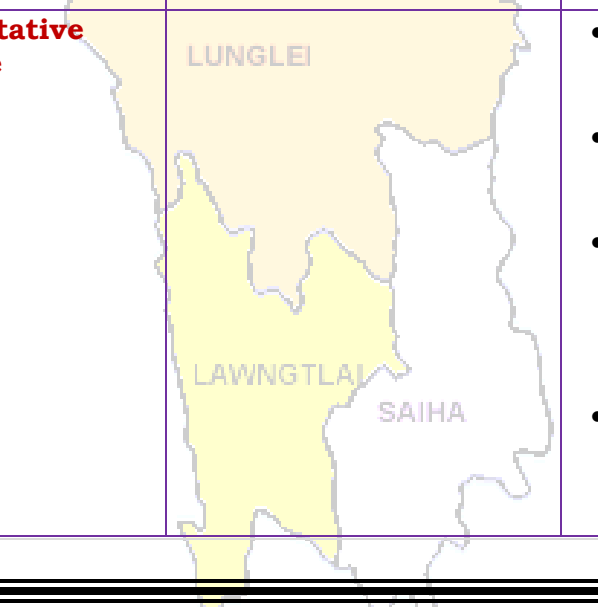
Weekly cumulative rainfall: **00.0mm**

NDVI for Mizoram

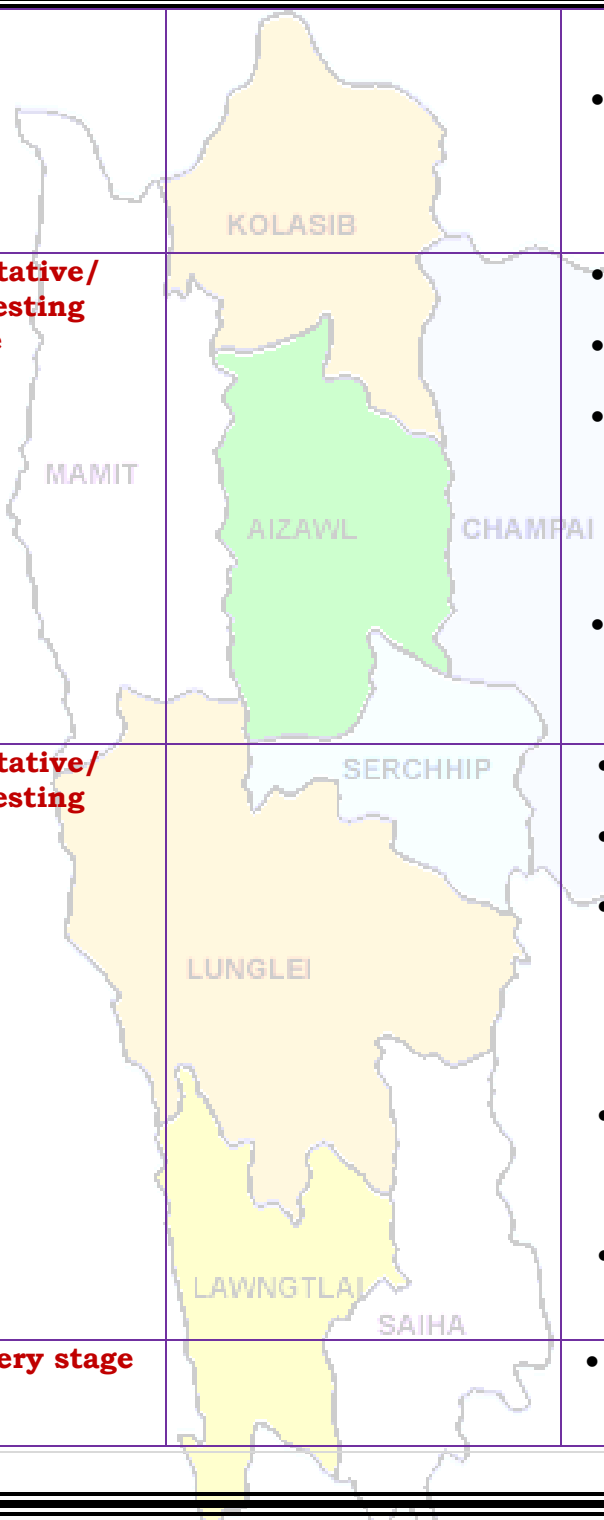


NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			• 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.
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. • 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 hliahkhuh tur.

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E-mail: kolasib.amfu@gov.in

		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 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	• Dithane M-45 chu tui litre khatah

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		blotch	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 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**		• 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**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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. • 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. • Bawngek 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

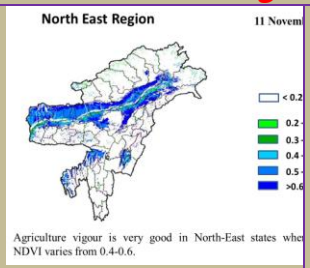
Bulletin No: -569/2015/ Bulletin/English **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	27	28	26	29	29
Min Temp (ºC)	8	10	8	9	8
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	35	33	40	33	27
Wind Speed (KmpH)	2	2	4	4	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 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 26-29ºC and 8-10ºC. Maximum relative humidity is expected in the range of 100% and minimum may from 27-40%. 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Flowering/**		✚ Cleaning near base of the plant

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

	harvesting		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 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. - Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. - Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m^2) - Line sowing of seeds (7-10cm)

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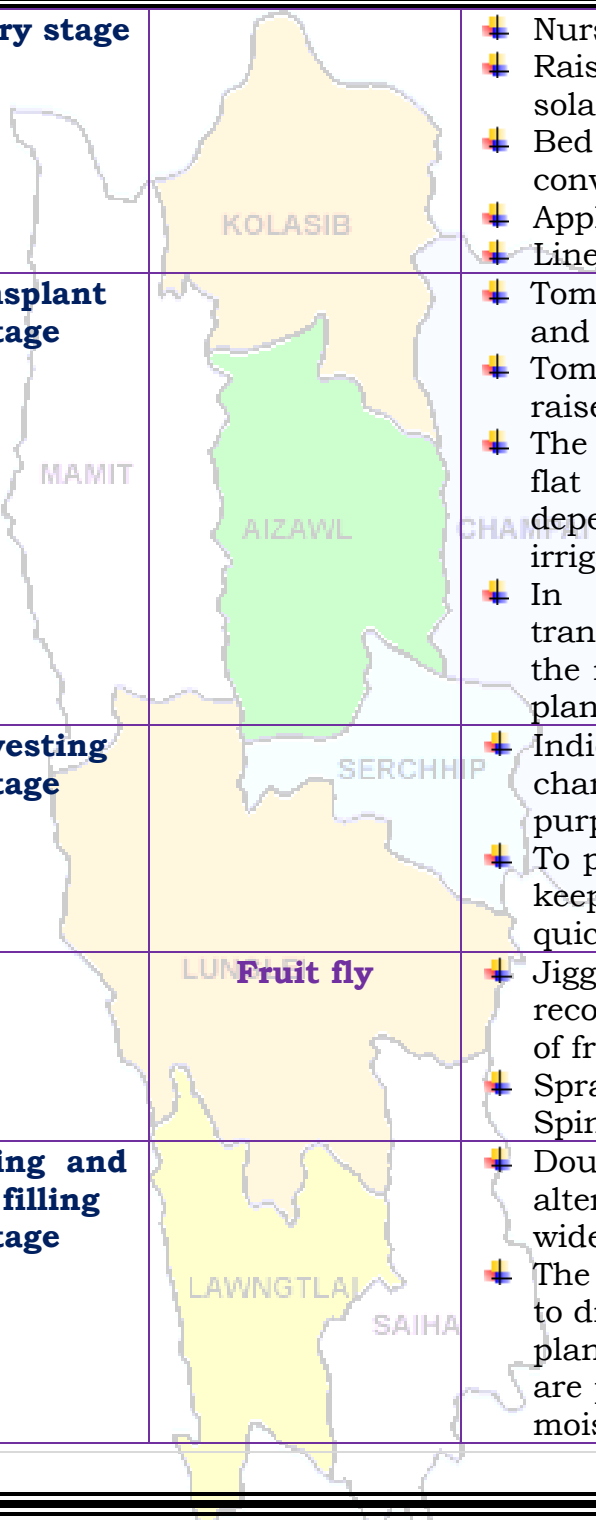
E-mail: kolasib.amfu@gov.in

Chilli	**Nursery stage**		✦ Nursery preparation for tomato. ✦ Raised bed, nursery bed solarisation. ✦ Bed should be 1m width and conventional length. ✦ Application of FYM (1.5-2.0 kg/ m^2) ✦ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✦ Tomato is planted in well pulverized and leveled field. ✦ Tomato 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.
Passion Fruit	**Harvesting stage**		✦ Indication of fruit harvest will change colour green to slight purple. ✦ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✦ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✦ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✦ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

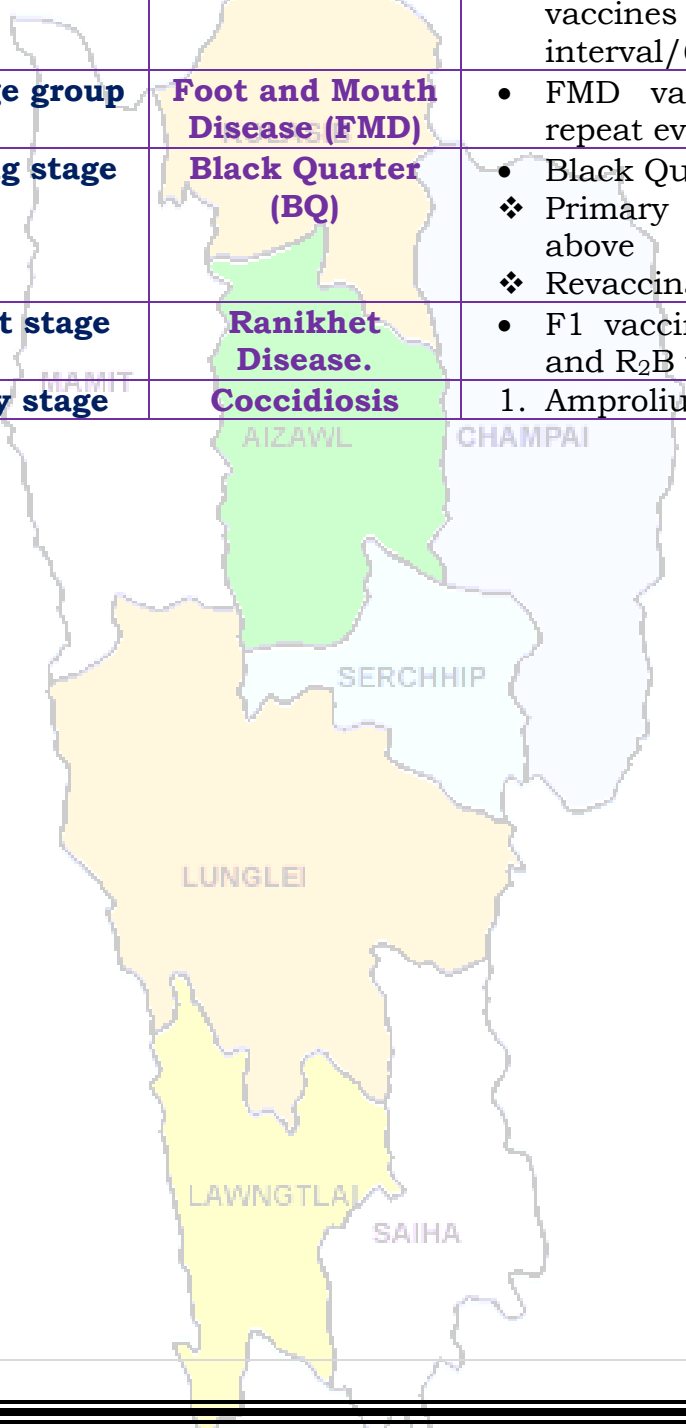
			season, they may begin to decay.
French bean	**Flowering stage**		✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✓ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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	**Vegetative stage**		▪ Remove unwanted plant near base of the plant and cut dead branches. ▪ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ▪ Earting up of soil along with fertilizer mixture.
		Thrips	▪ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	▪ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		(PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

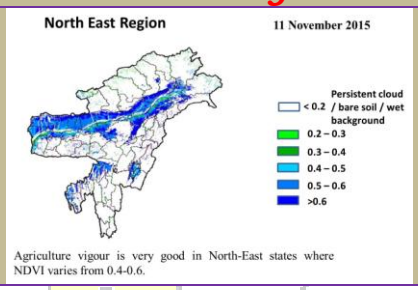
Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	27	28	26	29	29
Min Temp (oC)	8	10	8	9	8
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	35	33	40	33	27
Wind Speed (KmpH)	2	2	4	4	4
*Wind Direction	E	E	E	E	E

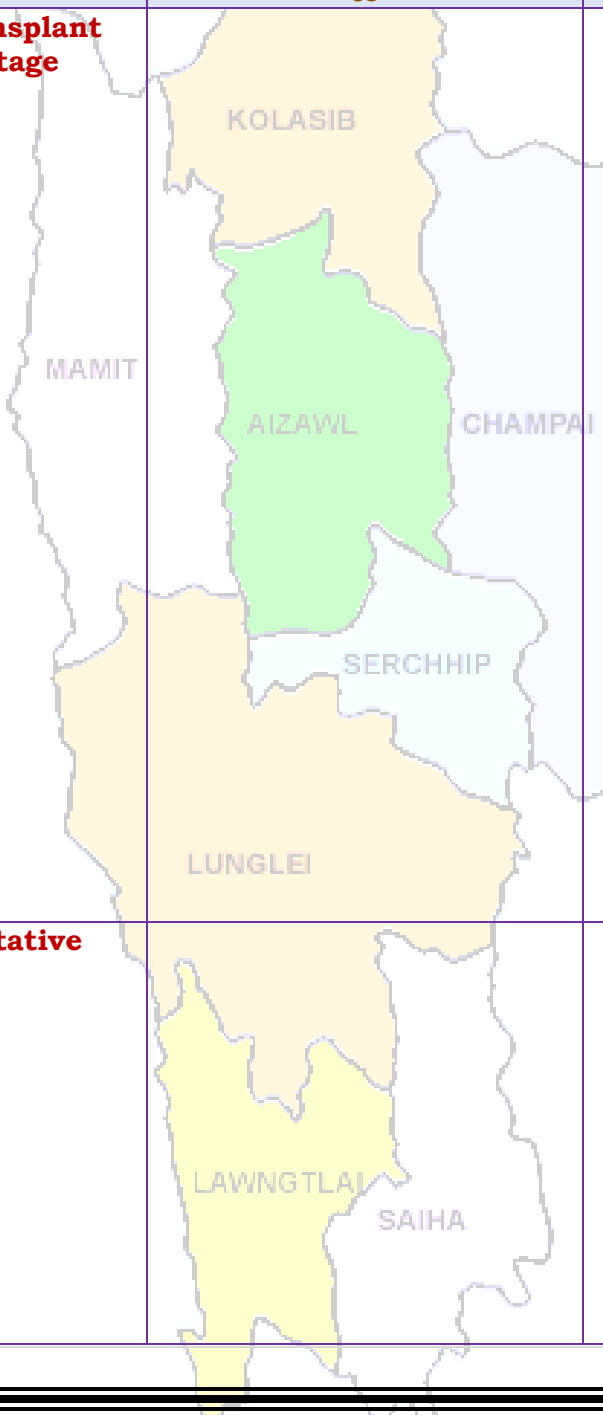
Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

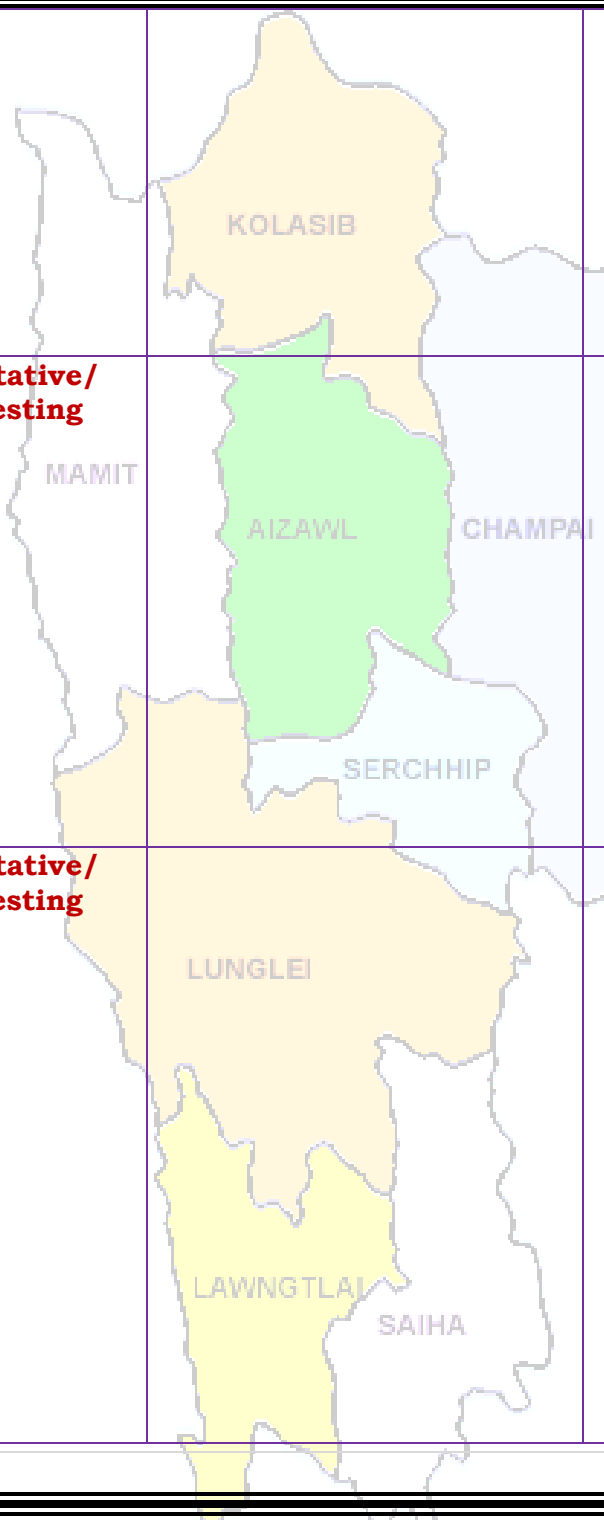
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan	
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 26-29^{0}C a ni ang a.A vawh lai ber in 8-10^{0}C ni tur ah beisei a ni.RH san lai berin 100% leh a hniam lai berin 27-40% 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".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi),

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight, gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			tur.
Sapthei	**Nursery 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.
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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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**		• 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek 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
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. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

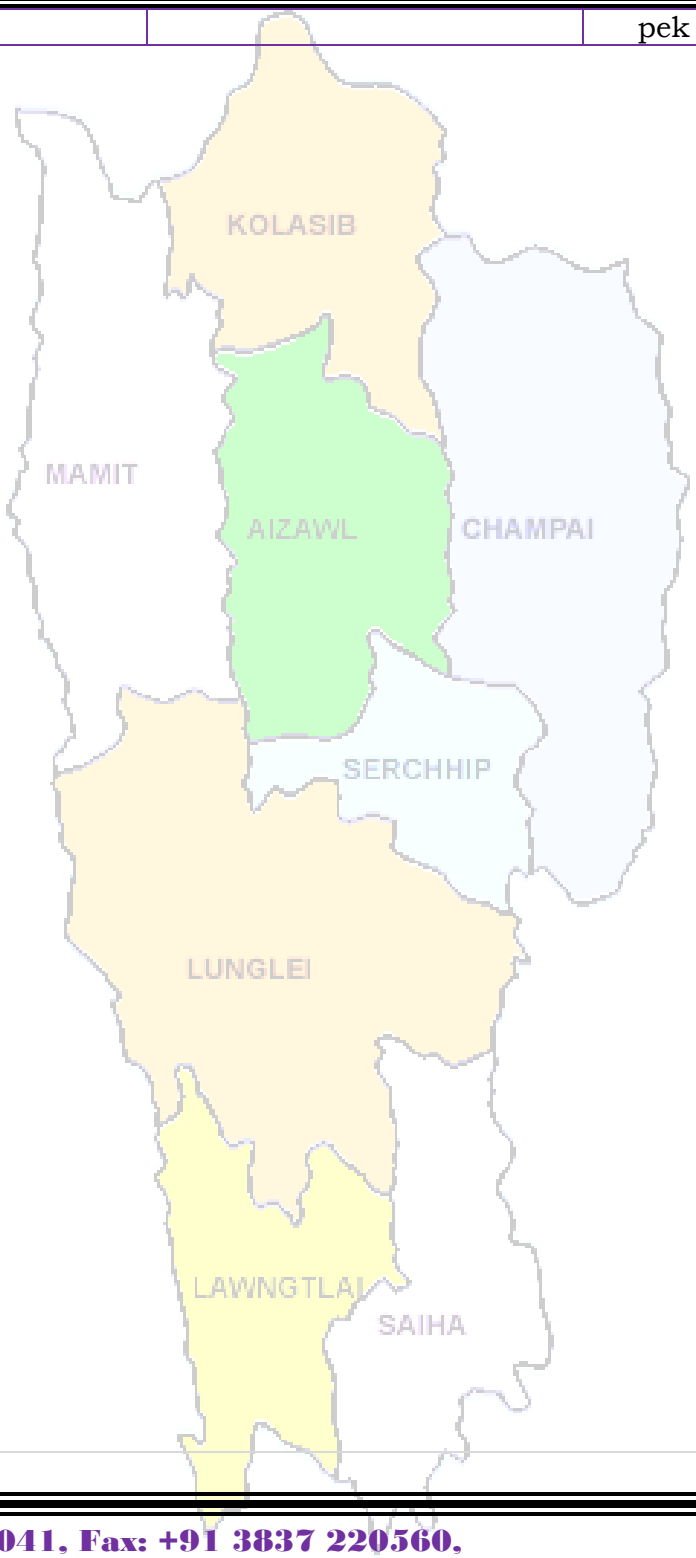
			P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak 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.
		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			pek tur.



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	27	28	26	28	29
Min Temp (oC)	9	12	9	10	9
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Max RH (%)	100	96	98	100	100
Min RH (%)	41	40	44	38	30
Wind Speed (KmpH)	2	2	4	4	4
*Wind Direction	E	E	E	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.

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Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Ni thum kaltha sik leh sa dinhmun tlangpui

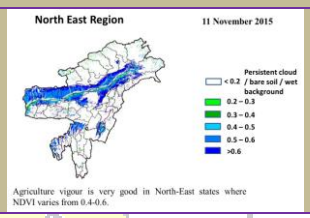
Khua a lum lai berin 27.1-28.0^{0}C leh a vawh lai berin 16.1-18.3^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 99% leh a hniam lai 52-78% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. **(Source-Mosdac.gov.in)**

November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 26-29^{0}C a ni ang a.A vawh lai ber in 9-12^{0}C ni tur ah beisei a ni.RH san lai berin 96-100% leh a hniam lai berin 30-41% 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.

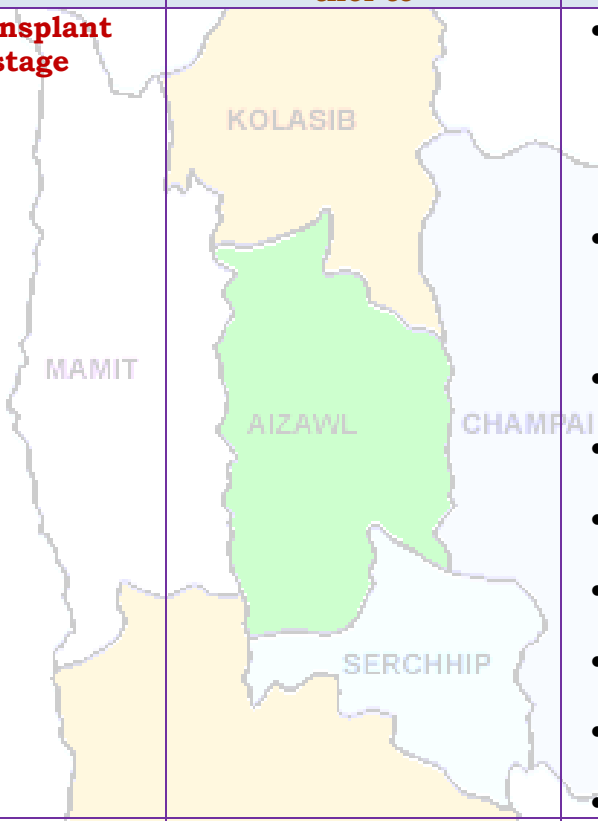
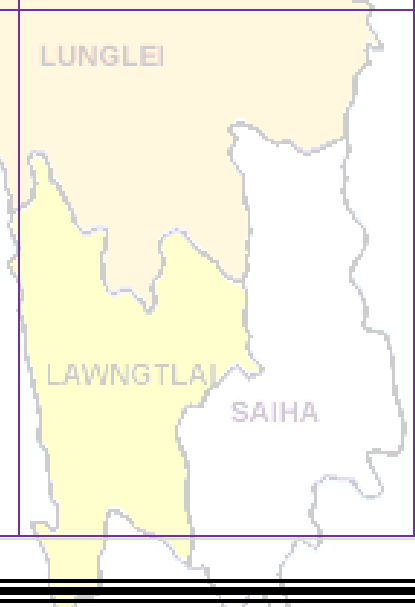
Weekly cumulative rainfall: **00.0mm**

NDVI for Mizoram



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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			• 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.
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. • 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 hliahkhuh tur.

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E-mail: kolasib.amfu@gov.in

		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 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	• Dithane M-45 chu tui litre khatah

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		blotch	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 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**		• 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**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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. • 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. • Bawngek 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

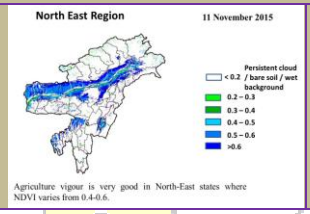
Bulletin No: -569/2015/ Bulletin/English **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	27	28	26	28	29
Min Temp (ºC)	9	12	9	10	9
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	100	96	98	100	100
Min RH (%)	41	40	44	38	30
Wind Speed (KmpH)	2	2	4	4	4
***Wind Direction**	E	E	E	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 2015.
The temperature range for maximum and minimum were 27.1-28.0ºC and 16.1-18.3ºC respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 99% & minimum of 52-78%. Rainfall recorded for the past three days is **000.00mm. (Source-mosdac.gov.in)**	There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 26-29ºC and 9-12ºC. Maximum relative humidity is expected in the range of 96-100% and minimum may from 30-41%. Wind direction would be southeasterly 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Flowering/**		✚ Cleaning near base of the plant

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

	harvesting		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 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. - Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. - Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m^2) - Line sowing of seeds (7-10cm)

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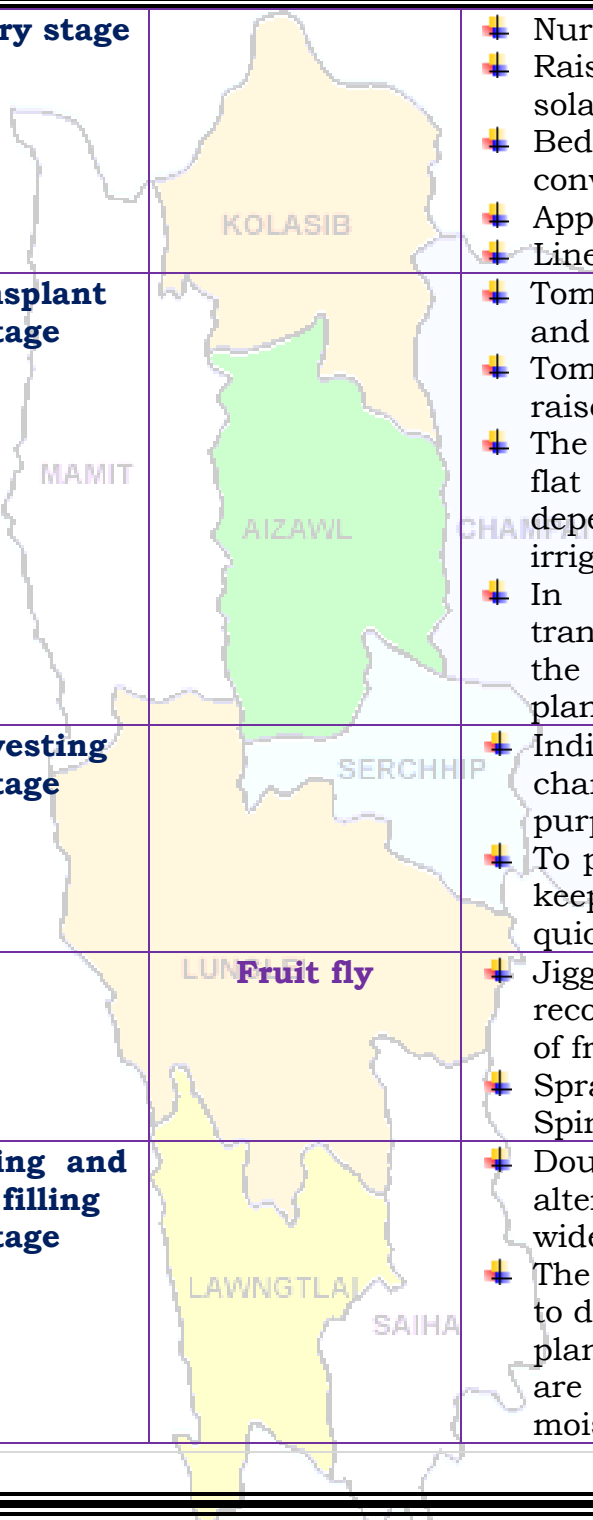
E-mail: kolasib.amfu@gov.in

Chilli	**Nursery stage**		✦ Nursery preparation for tomato. ✦ Raised bed, nursery bed solarisation. ✦ Bed should be 1m width and conventional length. ✦ Application of FYM (1.5-2.0 kg/ m^2) ✦ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✦ Tomato is planted in well pulverized and leveled field. ✦ Tomato 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.
Passion Fruit	**Harvesting stage**		✦ Indication of fruit harvest will change colour green to slight purple. ✦ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✦ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✦ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✦ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome**	1. Culling of positive pigs or piglets.

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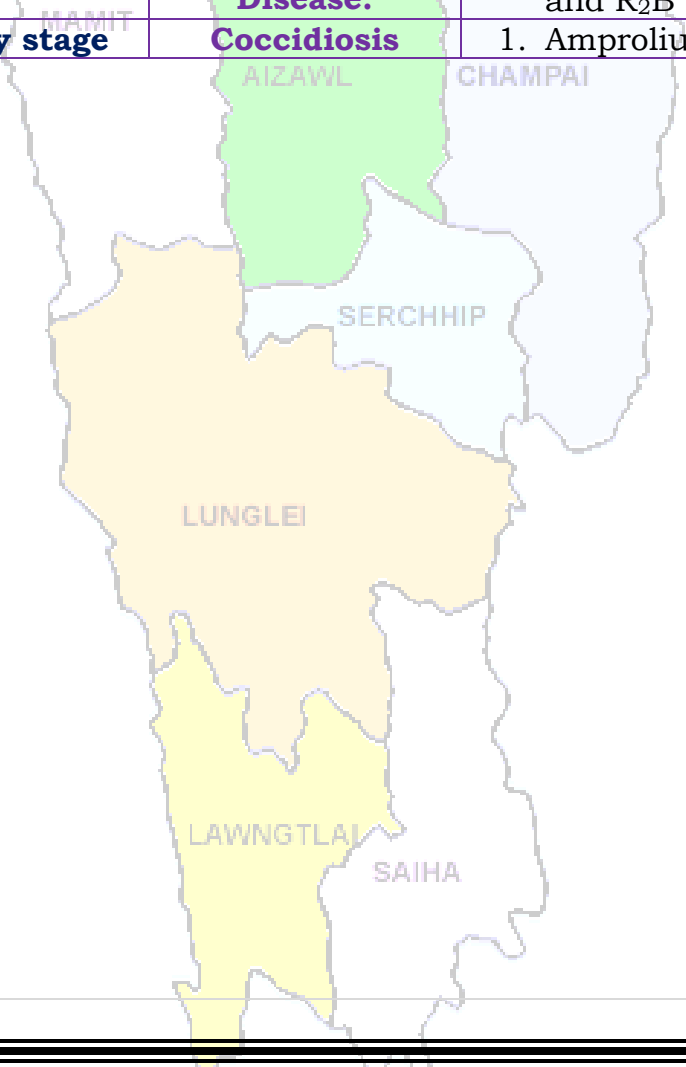
E-mail: kolasib.amfu@gov.in

		(PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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: 18 – 22 November, 2015**

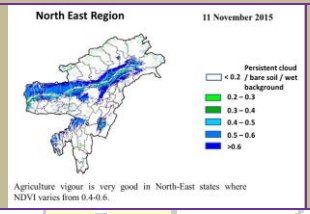
Bulletin No: -569/2015/ Bulletin/English **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	26	26	26	27	27
Min Temp (ºC)	10	11	10	9	8
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	99	99	99	99	98
Min RH (%)	43	43	50	38	31
Wind Speed (KmpH)	4	0	4	4	4
***Wind Direction**	S-E	E	S	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

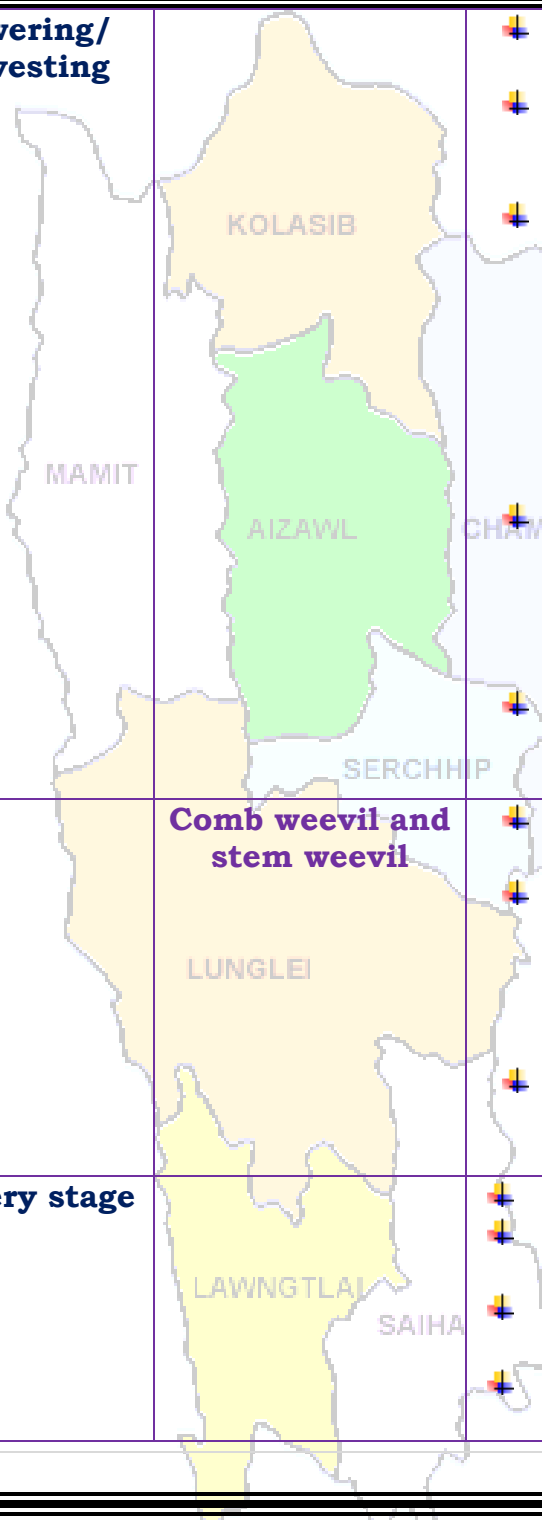
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 2015.
The temperature range for maximum and minimum were 23.8-26.2ºC and 15.4-16.8ºC respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 93-99% & minimum of 54-72%. Rainfall recorded for the past three days is **000.00mm. (Source-mosdac.gov.in)**	There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 26-27ºC and 8-11ºC. Maximum relative humidity is expected in the range of 98-99% and minimum may from 31-50%. Wind direction would be southeasterly to easterly with the wind speed of 0-4 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **00.0 mm**
NDVI for Mizoram	 NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Banana	**Flowering/ harvesting**		✚ 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 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. ✚ Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. ✚ Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		✚ Nursery preparation for tomato. ✚ Raised bed, nursery bed solarisation. ✚ Bed should be 1m width and conventional length. ✚ Application of FYM (1.5-2.0 kg/ m^2)

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			✓ Line sowing of seeds (7-10cm)
Chilli	**Nursery stage**		✓ Nursery preparation for tomato. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✓ Tomato is planted in well pulverized and leveled field. ✓ Tomato 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.
Passion Fruit	**Harvesting stage**		✓ Indication of fruit harvest will change colour green to slight purple. ✓ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✓ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✓ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✓ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			moisture is available as in rainy season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			✦ 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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		Syndrome (PRRS).	
	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
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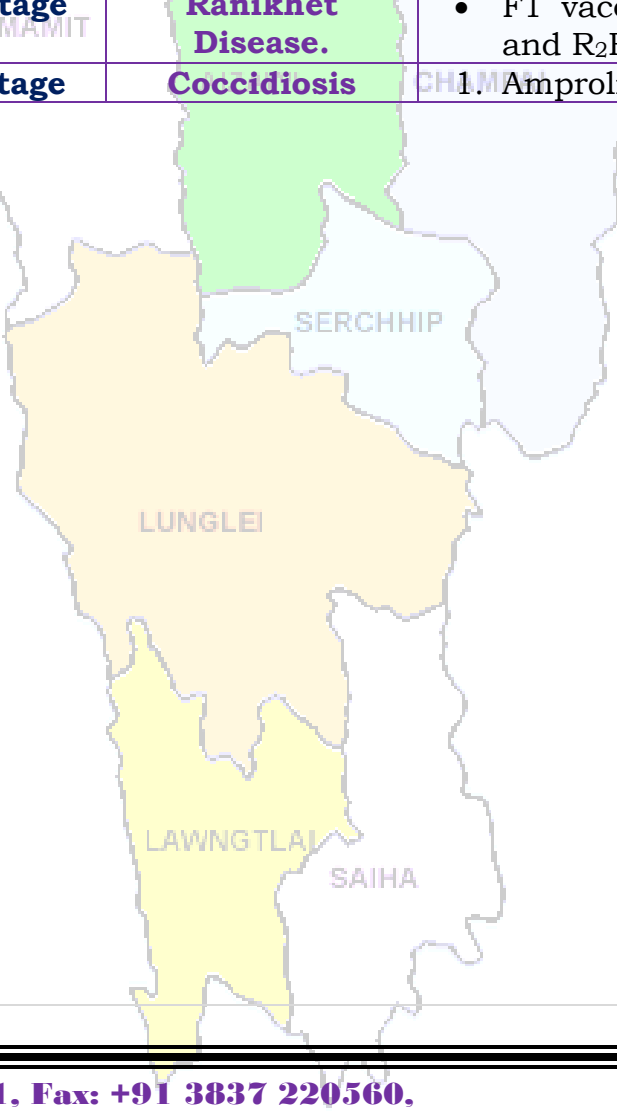

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Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

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***Wind Direction**	S-E	E	S	S-E	S-E

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STATUS OF MONSOON- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
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Ni thum kaltha sik leh sa dinhmun tlangpui

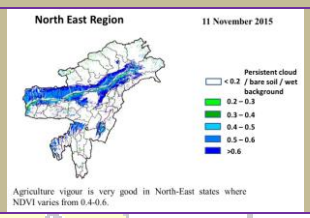
Khua a lum lai berin 23.8-26.2^{0}C leh a vawh lai berin 15.4-16.8^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 93-99% leh a hniam lai 54-72% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. **(Source- Mosdac.gov.in)**

November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 26-27^{0}C a ni ang a.A vawh lai ber in 8-11^{0}C ni tur ah beisei a ni.RH san lai berin 98-99% leh a hniam lai berin 31-50% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 0-4 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



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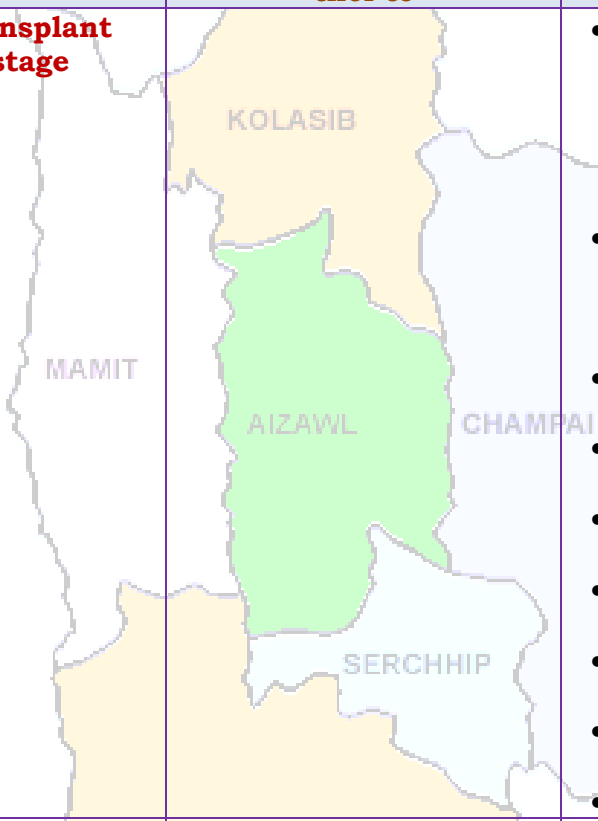
Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			• 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.
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. • 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 hliahkhuh tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
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		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 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	• Dithane M-45 chu tui litre khatah

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		blotch	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 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**		• 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**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

Phone: +91 3837 220041, Fax: +91 3837 220560,
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			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. • 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. • Bawngek 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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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: 18 – 22 November, 2015**

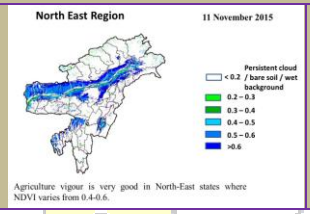
Bulletin No: -569/2015/ Bulletin/English **Date of issue: 17th November, 2015**

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	28	28	28	29	29
Min Temp (ºC)	11	14	10	12	10
Cloud Coverage	Partially clear	Mainly cloudy	Mainly clear	Clear sky	Clear sky
Max RH (%)	99	94	97	97	96
Min RH (%)	42	41	44	38	30
Wind Speed (KmpH)	3	2	4	4	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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 2015.
The temperature range for maximum and minimum were 26.1-27.8ºC and 17.1-18.8ºC respectively. Clear sky was observed. Wind direction is southeasterly. Maximum RH observed 92-97% & minimum of 61-67%. Rainfall recorded for the past three days is **000.00mm. (Source-mosdac.gov.in)**	There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 28-29ºC and 10-14ºC. Maximum relative humidity is expected in the range of 94-99% and minimum may from 30-44%. Wind direction would be southeasterly 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Flowering/**		✚ Cleaning near base of the plant

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

	harvesting		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 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. - Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. - Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m^2) - Line sowing of seeds (7-10cm)

Phone: +91 3837 220041, Fax: +91 3837 220560,
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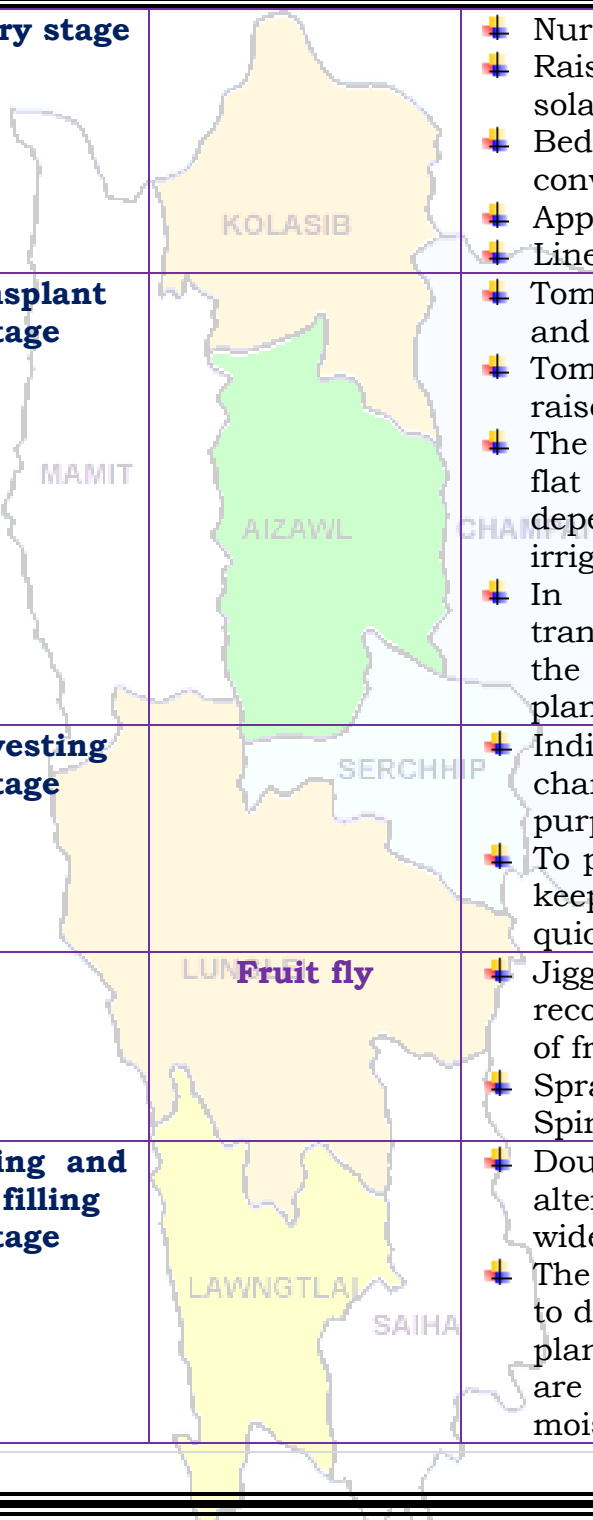
Chilli	**Nursery stage**		✦ Nursery preparation for tomato. ✦ Raised bed, nursery bed solarisation. ✦ Bed should be 1m width and conventional length. ✦ Application of FYM (1.5-2.0 kg/ m^2) ✦ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✦ Tomato is planted in well pulverized and leveled field. ✦ Tomato 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.
Passion Fruit	**Harvesting stage**		✦ Indication of fruit harvest will change colour green to slight purple. ✦ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✦ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✦ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✦ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

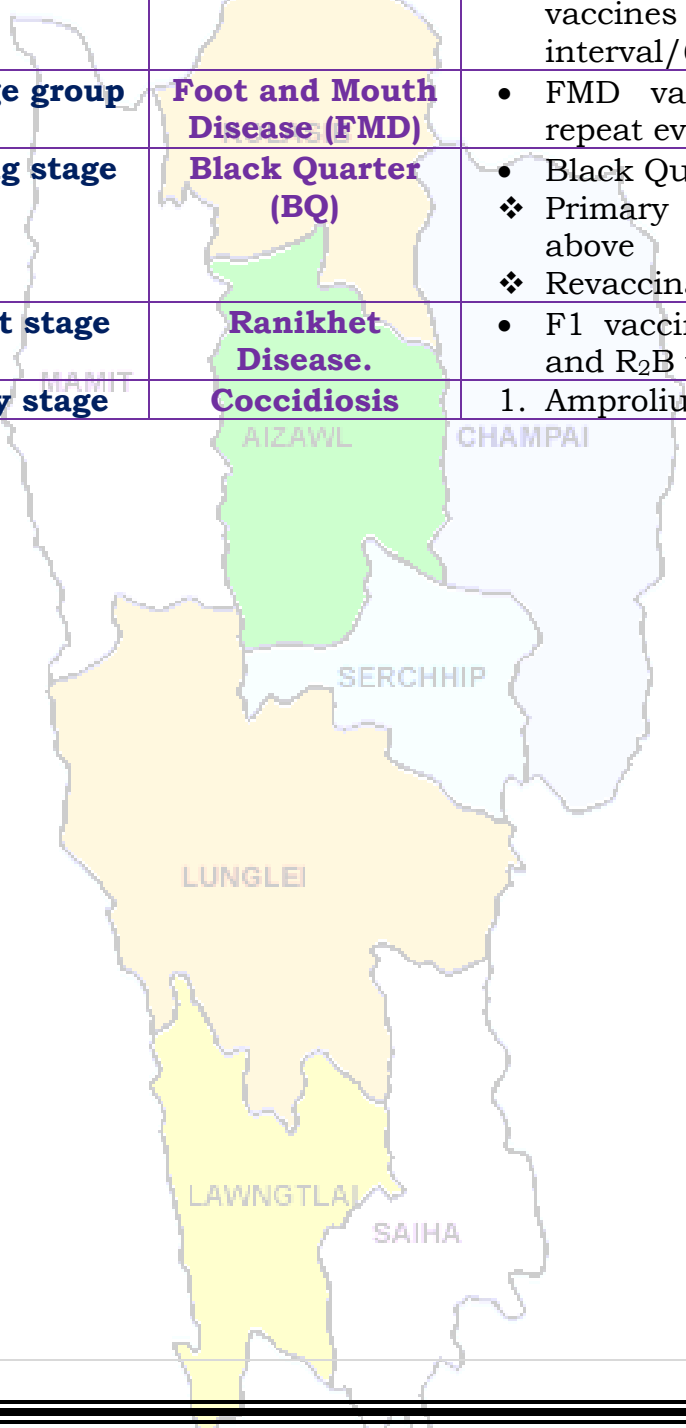
			season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		(PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
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Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue: 17th November, 2015**

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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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
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Ni thum kaltha sik leh sa dinhmun tlangpui

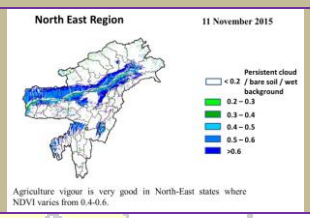
Khua a lum lai berin 26.1-27.8^{0}C leh a vawh lai berin 17.1-18.8^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 92-97% leh a hniam lai 61-67% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **000.00mm** ani. **(Source- Mosdac.gov.in)**

November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan

Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 28-29^{0}C a ni ang a.A vawh lai ber in 10-14^{0}C ni tur ah beisei a ni.RH san lai berin 94-99% leh a hniam lai berin 30-44% 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



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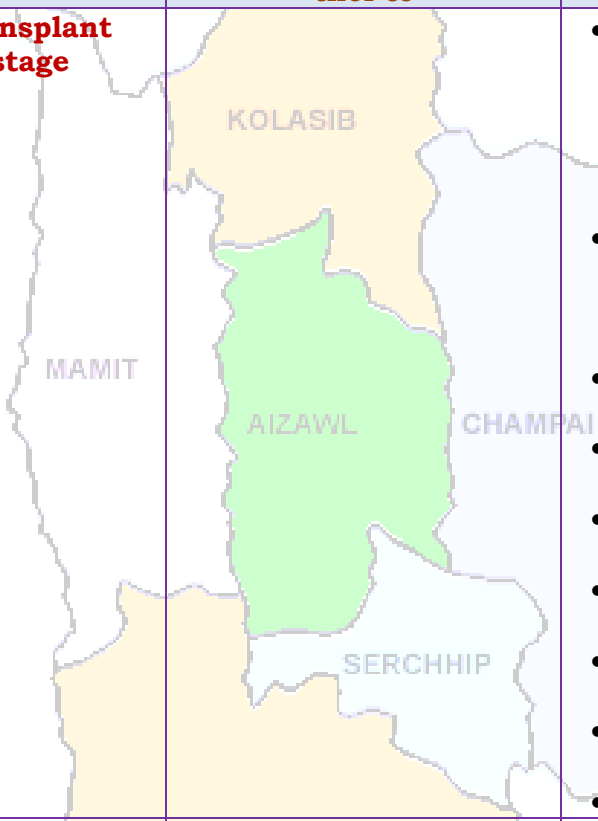
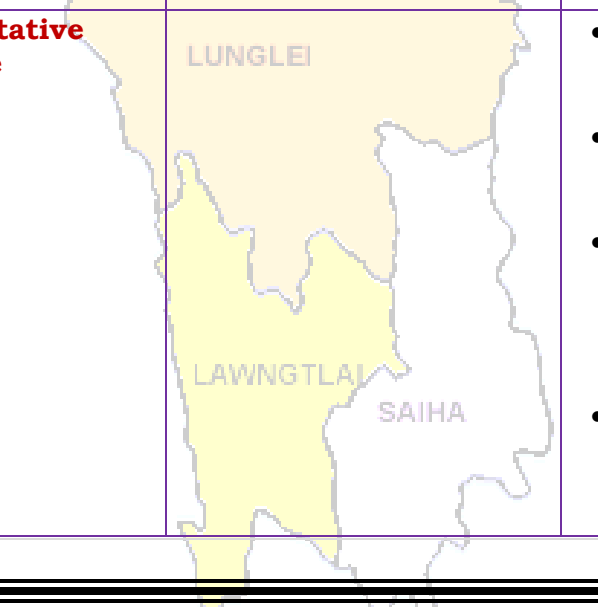
Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			• 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.
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. • 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 hliahkhuh tur.

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E-mail: kolasib.amfu@gov.in

		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 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	• Dithane M-45 chu tui litre khatah

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		blotch	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 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**		• 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**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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. • 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. • Bawngek 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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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:** 18 – 22 November, 2015

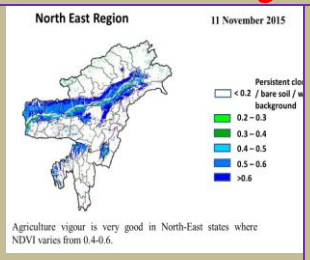
Bulletin No: -569/2015/ Bulletin/English **Date of issue:** 17th November, 2015

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	28	28	27	29	30
Min Temp (ºC)	11	12	12	11	11
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	95	91	89	93	93
Min RH (%)	40	37	41	36	35
Wind Speed (KmpH)	4	4	5	4	4
*Wind Direction	N-E	E	N-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- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

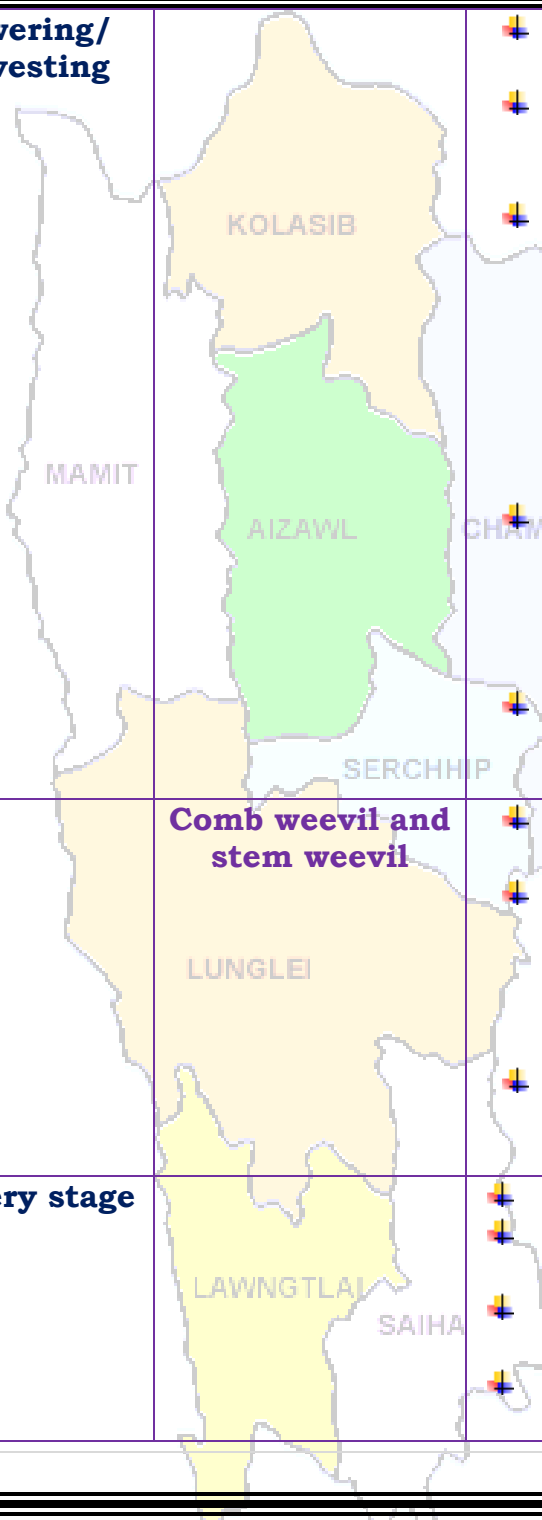
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Weather summary of the past three days	Weather forecast valid from 18th November, 2015 To 22nd November, 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 27-30ºC and 11-12ºC. Maximum relative humidity is expected in the range of 89-95% and minimum may from 35-41%. Wind direction would be easterly 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 for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	✚ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four sides are retained and others cut at their bases 20-25 cm above ground level in case of seedling trees, while 5-7 cm above bud union in case of budded plants. ✚ A smaller dose of these nutrients (250-300 g N, 200-250 g P^2O and 250-300 g KO) is required for other citrus fruits also. Liming is also beneficial to citrus, especially in this region because of its acidic soil. ✚ Lime can also be sprayed along with other nutrients but in the long run basal application is more beneficial at the rate of 500-800 g per plant.
Oil plam	**Flowering stage/Fruit formation stage**		✚ Application of split dose of fertilizer 600: 200:100 (g/pt) in flowering plant. ✚ Apply micro-nutrients viz. zinc, 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. ✚ Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

Banana	**Flowering/ harvesting**		▪ 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 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. ▪ Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. ▪ Fruits are harvested when they attain full size, develop attractive yellow colour.
		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	**Nursery stage**		▪ Nursery preparation for tomato. ▪ Raised bed, nursery bed solarisation. ▪ Bed should be 1m width and conventional length. ▪ Application of FYM (1.5-2.0 kg/ m^2)

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			✚ Line sowing of seeds (7-10cm)
Chilli	**Nursery stage**		✚ Nursery preparation for tomato. ✚ Raised bed, nursery bed solarisation. ✚ Bed should be 1m width and conventional length. ✚ Application of FYM (1.5-2.0 kg/ m^2) ✚ Line sowing of seeds (7-10cm)
Tomato	**Transplant stage**		✚ Tomato is planted in well pulverized and leveled field. ✚ Tomato 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.
Passion Fruit	**Harvesting stage**		✚ Indication of fruit harvest will change colour green to slight purple. ✚ To prevent weight loss or shrinking keep in cool place in room or sale it quickly
		Fruit fly	✚ Jiggery (50g) + malathion (10ml) is recommended for the management of fruit flies. ✚ Spray any contact poison like Spinosad or cypermethirn (2ml/lt).
Pineapple	**Planting and gap filling stage**		✚ 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			moisture is available as in rainy season, they may begin to decay.
French bean	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cowpea	**Flowering stage**		✚ Weeding near the plant ✚ Draining of excess water and preparation mound near the base. ✚ Apply split dose of nitrogen near base of the plant.
Cole crop	**Vegetative stage**	**Land preparation**	✚ Main land preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Plough the field 3-4 times. ✓ Planting distance, plant to plant 45 cm and row to row (60-70) cm ✓ Application of FYM (1.5-2.0 kg/ m2) ✓ Fertilizer application 180:50:50 kg/ha.
		Damping off	✚ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✚ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		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.

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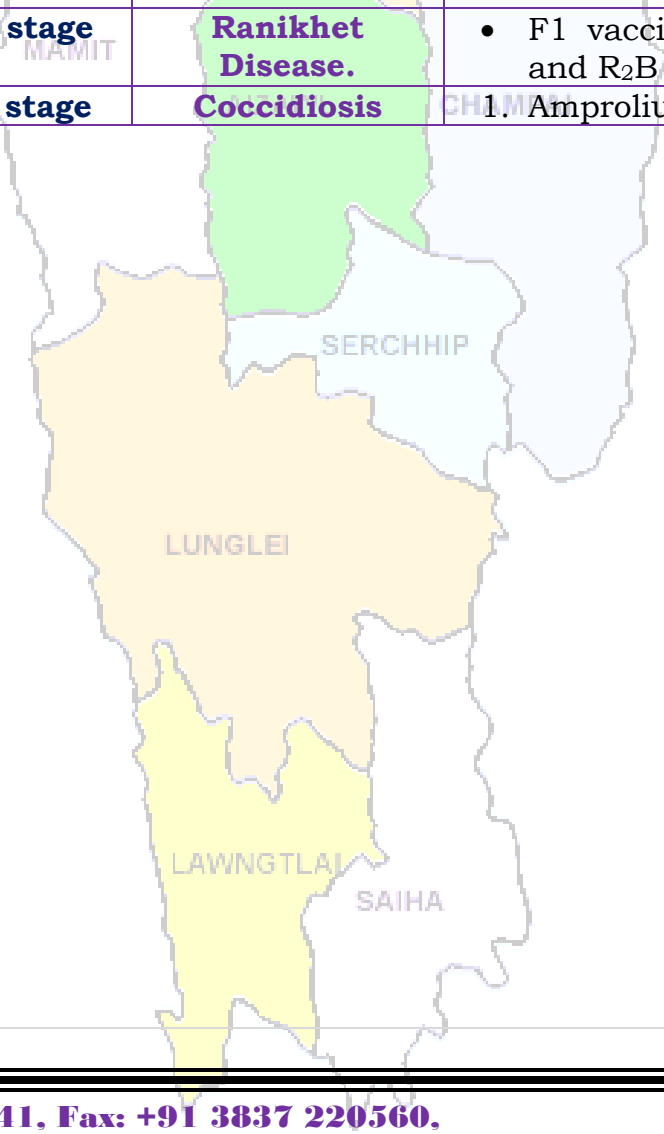
E-mail: kolasib.amfu@gov.in

			✦ 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 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	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory**	1. Culling of positive pigs or piglets.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

		Syndrome (PRRS).	
	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 R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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. 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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

GRAMIN KRISHI 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:** 18 – 22 November, 2015

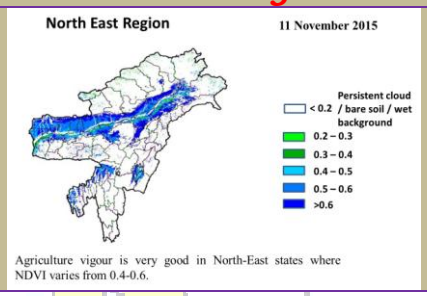
Bulletin No: -569/2015/ Bulletin/Mizo **Date of issue:** 17th November, 2015

Parameters	18.11.2015	19.11.2015	20.11.2015	21.11.2015	22.11.2015
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	28	28	27	29	30
Min Temp (oC)	11	12	12	11	11
Cloud Coverage	Partially clear	Partially clear	Partially clear	Clear sky	Clear sky
Max RH (%)	95	91	89	93	93
Min RH (%)	40	37	41	36	35
Wind Speed (KmpH)	4	4	5	4	4
*Wind Direction	N-E	E	N-E	E	E

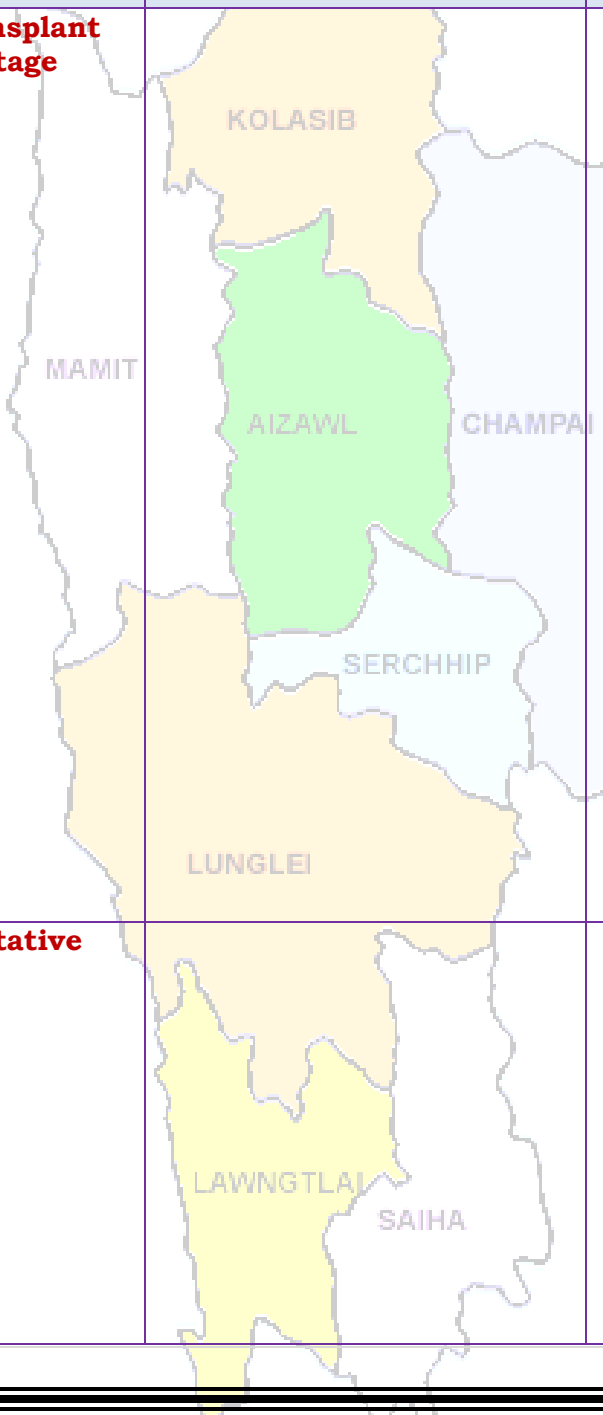
Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- October 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

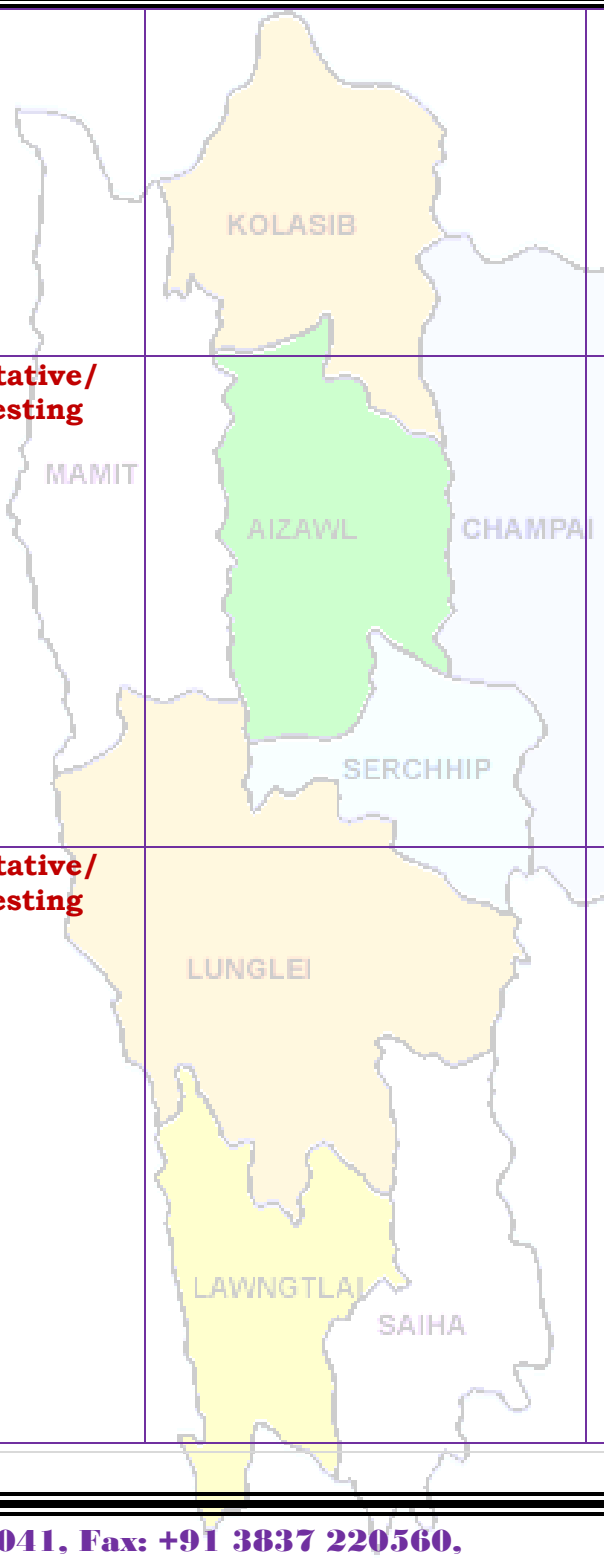
Aizawl- 283.0mm (44.8mm)	Champhai- 0.00mm (35.9mm)	Saiha- 57.9 mm (64.0mm)	Kolasib- 50.0mm (34.8mm)
Lawngtlai-135.3mm (54.1mm)	Lunglei-130.3mm (33.7mm)	Mamit-231.0mm (17.9mm)	Serchhip-234.8mm (56.3mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	November 18, 2015 atanga November 22, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 27-30^{0}C a ni ang a.A vawh lai ber in 11-12^{0}C ni tur ah beisei a ni.RH san lai berin 89-95% leh a hniam lai berin 35-41% 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	 Agriculture vigour is very good in North-East states where NDVI varies from 0.4-0.6.
	NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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	**Transplant 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 bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek 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.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi),

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight, gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting 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 hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla 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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			tur.
Sapthei	**Nursery 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.
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. • 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			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 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**		• 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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

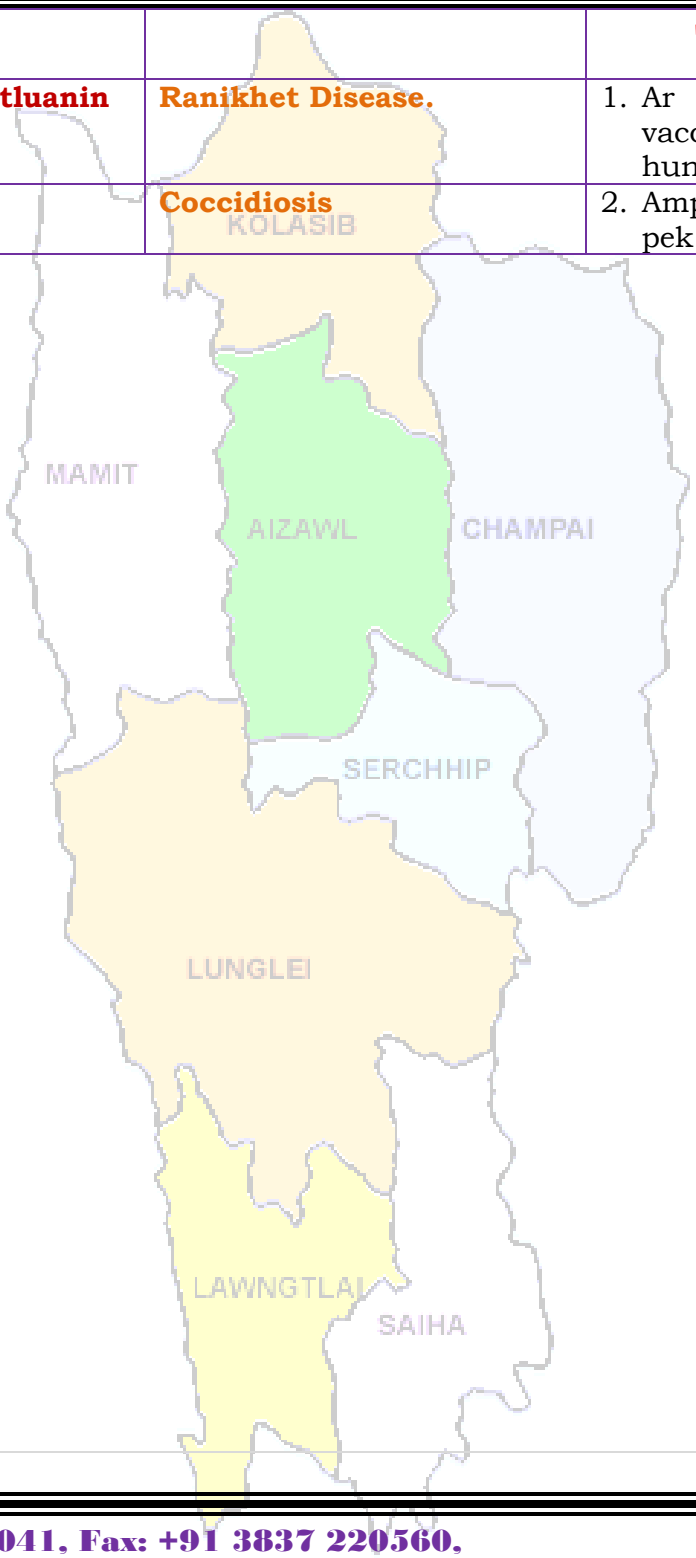
			emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		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
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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek 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.
		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.

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

			➢ 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_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.



Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in

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 kvknahthial@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	vvl9@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

Phone: +91 3837 220041, Fax: +91 3837 220560,
E-mail: kolasib.amfu@gov.in