



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Lawngtlai

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	4	7	10	19	7
Max Temp (°C)	30	30	29	29	31
Min Temp (°C)	24	24	25	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	95	95	96	97	97
Min RH (%)	74	61	84	92	68
Wind Speed (Kmph)	4	4	4	2	3
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

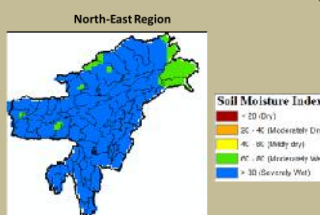
Ni thum kalta sik leh sa dinhmun tlangpui

23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 29-31°C a ni ang a. A vawh lai ber in 24-25°C ni tura beisei a ni. RH san lai berin 95-97% leh a hniam lai berin 61-92% ni tur a rin niin. Thli hi darkar khatah 2-4 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 47.0mm

NDVI for Mizoram



Extremely wet condition of soil moisture is observed over entire districts of North-East Region.

1. Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmuna phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui). ✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	KOLASIB	✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAL SERCHHIP	✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. ✚ Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paih fai a, hnim te tih fai baw k tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tih na a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tih fai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah baw k a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawhthlak a, a kung bul vel tih fai baw k tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haw luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi ranning)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Ranning thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu ranning)	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Lunglei

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	5	9	18	12	4
Max Temp (°C)	30	30	30	31	31
Min Temp (°C)	24	24	25	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	99	99
Min RH (%)	68	62	92	94	68
Wind Speed (Kmph)	3	3	2	2	2
*Wind Direction	S-E	S-E	E	S-E	E

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

STATUS OF MONSOON- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

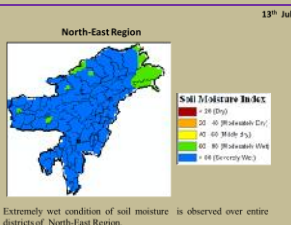
The temperature range for maximum and minimum were 20.4-23.2°C and 17.3-18.6°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 85-97% & minimum of 50-81%. Rainfall recorded for the past three days is **31.50 mm.** (Source-NICRA, AWS, Network)

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-31°C and 24-25°C. Maximum relative humidity is expected in the range of 98-99% and minimum may from 62-94%. Wind direction would be southeasterly to easterly and southeasterly with the wind speed of 2-3 km per hour. Mainly clear sky will prevail during the next five days.

Weekly cumulative rainfall: 48.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminior and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.

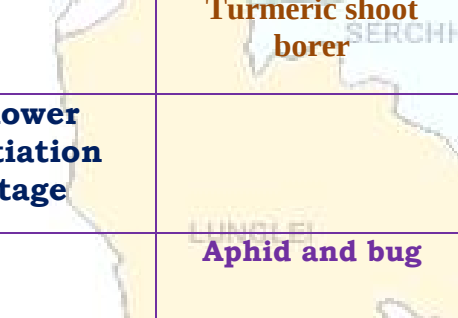


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Lunglei

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	5	9	18	12	4
Max Temp (°C)	30	30	30	31	31
Min Temp (°C)	24	24	25	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	99	99
Min RH (%)	68	62	92	94	68
Wind Speed (Kmph)	3	3	2	2	2
*Wind Direction	S-E	S-E	E	S-E	E

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

STATUS OF MONSOON- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

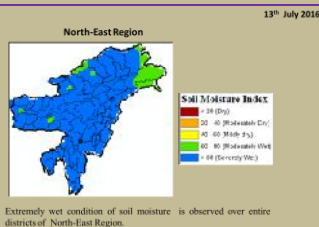
23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Khua a lum lai berin 20.4-23.2°C leh a vawh lai berin 17.3-18.6°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 85-97% a ni a, a hniam lai berin 50-81% ani. Ni 3 kal ta chhung a ruah tla zat chu **31.50 mm** a ni.
(Source-NICRA, AWS, Network)

Ni 4 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 30-31°C a ni ang a. A vawh lai berin 24-25°C ni tura beisei a ni. RH san lai berin 98-99% leh a hniam lai berin 62-94% ni tur a rin niin. Thli hi darkar khatah 2-3 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 48.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmuna phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			Kung tlemte chauhin he natna an vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly 	Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		- A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. - Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. - Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. - Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		- Balhla kung bul vel tihfai a a hnah ro te thlak bawk tur. - Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. - 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.
		Banana Rhizome weevil 	Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun		✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma		✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai		✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tihna a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAT	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haww luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNG SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawhthlak a, a kung bul vel tih fai bawk tur a



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			ni. - A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng		- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng		- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung)		Natna in a tihchhiat tawh thlai peng lakthlak a paih tur.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	leh a rah bawm chi rannung)		Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle KOLASIB	Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai	MAMIT AIZAWL CHAMPAI	- Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. - Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. - Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk	SERCHHIP	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennen tui hawku luanna mumal tak siam tur.
		Rice yellow stem borer LUNGLEI	- Buh tiak a a hnah hmawr tanbun tur. - Natna kai tawhna peng te lakthlak a, paih tur. - Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai	LAWNGTLAI	- A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih bawk tur. - Leitha nen rihvur tur. - Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma	SAIHA	- Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. - Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp,



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu ranning)	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	AIZAWL	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.
--	--	--------------------	---





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Mamit

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	8	9	20	9	3
Max Temp (°C)	30	30	30	30	30
Min Temp (°C)	25	25	24	24	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	100	97
Min RH (%)	58	75	91	97	74
Wind Speed (Kmph)	4	4	4	2	4
*Wind Direction	S-E	S-E	S-E	S-E	S-E

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

STATUS OF MONSOON- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

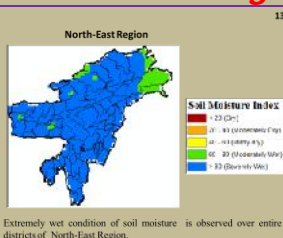
The temperature range for maximum and minimum were 24.5-27.2°C and 20.4-21.2°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 76-84% & minimum of 48-70%. Rainfall recorded for the past three days is **43.30 mm. (Source-mosdac.gov.in)**

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of very heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30°C and 24-25°C. Maximum relative humidity is expected in the range of 97-100% and minimum may from 58-97%. Wind direction would be southeasterly with the wind speed of 2-4 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 49.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage		the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		KOLASIB	
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		AIZAWL	
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
		SERCHHIP	
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found
		SAIHA	



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer and	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected pant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Mamit

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	8	9	120	9	3
Max Temp (°C)	30	30	20	30	30
Min Temp (°C)	25	25	24	24	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	100	97
Min RH (%)	58	75	91	97	74
Wind Speed (Kmph)	4	4	4	2	4
*Wind Direction	S-E	S-E	S-E	S-E	S-E

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

STATUS OF MONSOON- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

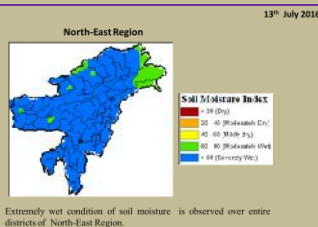
Khua a lum lai berin 24.5-27.2°C leh a vawh lai berin 20.4-21.2°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 76-84% a ni a, a hniam lai berin 48-70% ani. Ni 3 kal ta chhung a ruah tla zat chu **43.30 mm** a ni.
(Source- Mosdac.gov.in)

23th – 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 30°C a ni ang a. A vawh lai berin 24-25°C ni tura beisei a ni. RH san lai berin 97-100% leh a hniam lai berin 58-97% ni tur a rin niin. Thli hi darkar khatah 2-4 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 49.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmuna phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui).
	A hmin hun	KOLASIB	Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana fruit caterpillar	- Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. - A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. - Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAL SERCHHIP	- Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur. - A bulhnai vel tihfai that tur. - Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. - Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. - A zar no ho a zamna tur siam mumal tur.
		Aphid	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	- Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. - Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. - Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. - Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paih fai a, hnim te tih fai baw k tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tih na a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tih fai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah baw k a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawhthlak a, a kung bul vel tih fai baw k tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haw luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi ranning)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Ranning thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Saiha

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	5	6	15	15	0
Max Temp (°C)	31	31	31	32	32
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	96	96	97	97	99
Min RH (%)	78	61	84	93	70
Wind Speed (Kmph)	4	4	3	2	2
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

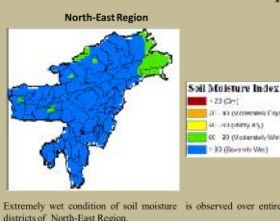
The temperature range for maximum and minimum were 17.2-20.6°C and 12.1-13.7°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 90-98% & minimum of 68-93%. Rainfall recorded for the past three days is **42.80 mm. (Source-mosdac.gov.in)**

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 31-32°C and 24-25°C. Maximum relative humidity is expected in the range of 96-99% and minimum may from 61-93%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Mainly clear sky will prevail during the next five days.

Weekly cumulative rainfall: 41.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lt of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lt) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Saiha

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	5	6	15	15	0
Max Temp (°C)	31	31	31	32	32
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	96	96	97	97	99
Min RH (%)	78	61	84	93	70
Wind Speed (Kmph)	4	4	3	2	2
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

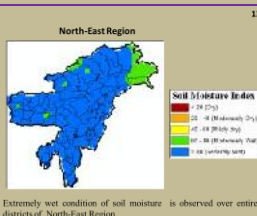
Khua a lum lai berin 17.2-20.6°C leh a vawh lai berin 12.1-13.7°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 90-98% a ni a, a hniam lai berin 68-93% ani. Ni 3 kal ta chhung a ruah tla zat chu **42.80 mm** a ni.
(Source- Mosdac.gov.in)

23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 31-32°C a ni ang a. A vawh lai berin 24-25°C ni tura beisei a ni. RH san lai berin 96-99% leh a hniam lai berin 61-93% ni tur a rin niin. Thli hi darkar khatah 2-4 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 41.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmunah phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui). ✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	KOLASIB	✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAI SERCHHIP	✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. ✚ Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paihfa a, hnim te tihfa bawk tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tihna a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tihfa that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haw luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi rannung)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu ranning)	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	AIZAWL	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Serchhip

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	8	9	10	7	4
Max Temp (°C)	32	32	32	32	32
Min Temp (°C)	25	25	25	26	26
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially cleat	Mainly clear
Max RH (%)	99	100	99	100	100
Min RH (%)	67	66	94	95	72
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	E	S-E	E	S-E	E

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

STATUS OF MONSOON- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

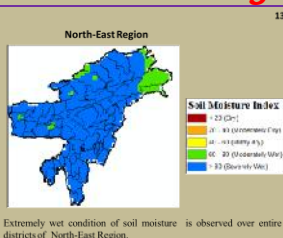
Weather summary of the past three days

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 32°C and 25-26°C. Maximum relative humidity is expected in the range of 99-100% and minimum may from 66-95%. Wind direction would be easterly to southeasterly and easterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 38.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly and	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer and	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Serchhip

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	8	9	10	7	4
Max Temp (°C)	32	32	32	32	32
Min Temp (°C)	25	25	25	26	26
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear	Mainly clear
Max RH (%)	99	100	99	100	100
Min RH (%)	67	66	94	95	72
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	E	S-E	E	S-E	E

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

STATUS OF MONSOON- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

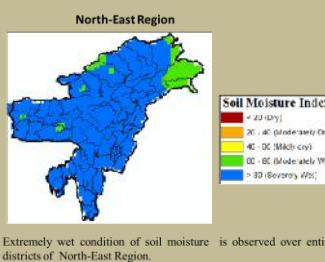
Ni thum kalta sik leh sa dinhmun tlangpui

23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 32°C a ni ang a. A vawh lai berin 25-26°C ni tura beisei a ni. RH san lai berin 99-100% leh a hniam lai berin 66-95% ni tur a rin niin. Thli hi darkar khatah 2 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 38.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmunah phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui). ✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	KOLASIB	✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAI SERCHHIP	✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. ✚ Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paih fai a, hnim te tih fai baw k tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tih na a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tih fai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah baw k a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawhthlak a, a kung bul vel tih fai baw k tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haww luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi rannung)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	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 kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Aizawl

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	6	10	16	9	3
Max Temp (°C)	28	28	28	29	29
Min Temp (°C)	23	23	23	23	23
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	99	99	99	100	99
Min RH (%)	58	77	94	96	76
Wind Speed (Kmph)	3	3	3	2	2
*Wind Direction	S-E	S-E	S-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- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

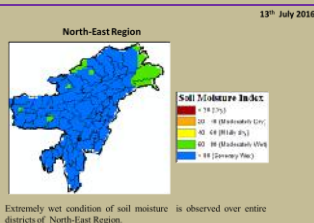
23th – 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Khua a lum lai berin 22.5-24.7°C leh a vawh lai berin 18.4-19.3°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 79-89% a ni a, a hniam lai berin 48-86% ani. Ni 3 kal ta chhung a ruah tla zat chu **37.30 mm** a ni.
(Source- Mosdac.gov.in)

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 28-29°C a ni ang a. A vawh lai ber in 23°C ni tura beisei a ni. RH san lai berin 99-100% leh a hniam lai berin 58-94% ni tur a rin niin. Thli hi darkar khatah 2-3 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 44.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmuna phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui). ✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	KOLASIB	✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAI SERCHHIP	✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. ✚ Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paihfa a, hnim te tihfa bawk tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tihna a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tihfa that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haw luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haw luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi ranning)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Ranning thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a taw vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a samrawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Aizawl

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	6	10	16	9	3
Max Temp (°C)	28	28	28	29	29
Min Temp (°C)	23	23	23	23	23
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	99	99	99	100	99
Min RH (%)	58	77	94	96	76
Wind Speed (Kmph)	3	3	3	2	2
*Wind Direction	S-E	S-E	S-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- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

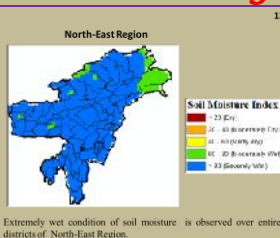
The temperature range for maximum and minimum were 22.5-24.7°C and 18.4-19.3°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 79-89% & minimum of 48-86%. Rainfall recorded for the past three days is **37.30 mm. (Source-mosdac.gov.in)**

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 28-29°C and 23°C. Maximum relative humidity is expected in the range of 99-100% and minimum may from 58-94%. Wind direction would be southeasterly to easterly and southeasterly with the wind speed of 2-3 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 44.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lit or bactericides Blitox 50 WG @ 0.01g/lit can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering to fruit formation stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60:50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Champhai

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	7	10	15	10	5
Max Temp (°C)	30	30	30	30	31
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	98	97
Min RH (%)	65	73	92	92	72
Wind Speed (Kmph)	2	3	2	2	3
*Wind Direction	S-E	S	S	S	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- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

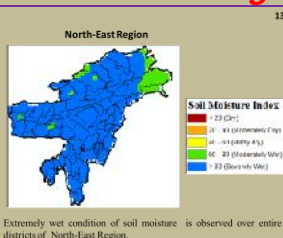
The temperature range for maximum and minimum were 23.1-27.6°C and 19.5-21.7°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 93-99% & minimum of 48-78%. Rainfall recorded for the past three days is **24.60 mm. (Source-mosdac.gov.in)**

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-31°C and 24-25°C. Maximum relative humidity is expected in the range of 98-99% and minimum may from 65-92%. Wind direction would be southeasterly to southerly with the wind speed of 2-3 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 47.0 mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. - Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.

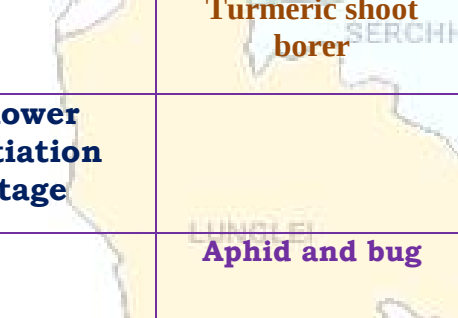


GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Champhai

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	7	10	15	10	5
Max Temp (°C)	30	30	30	30	31
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	99	98	97
Min RH (%)	65	73	92	92	72
Wind Speed (Kmph)	2	3	2	2	3
*Wind Direction	S-E	S	S	S	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- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

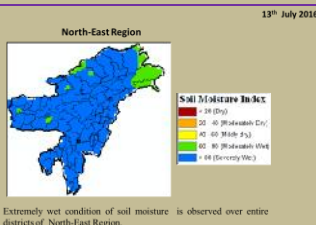
Khua a lum lai berin 23.1-27.6°C leh a vawh lai berin 19.5-21.7°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 93-99% a ni a, a hniam lai berin 48-78% ani. Ni 3 kal ta chhung a ruah tla zat chu **24.60 mm** a ni.
(Source- Mosdac.gov.in)

23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 30-31°C a ni ang a. A vawh lai berin 24-25°C ni tura beisei a ni. RH san lai berin 98-99% leh a hniam lai berin 65-92% ni tur a rin niin. Thli hi darkar khatah 2-3 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 47.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmunah phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui).
	A hmin hun	KOLASIB	Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana fruit caterpillar	- Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. - A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. - Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAI SERCHHIP	- Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur. - A bulhnai vel tihfai that tur. - Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. - Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. - A zar no ho a zamna tur siam mumal tur.
		Aphid	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	- Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. - Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. - Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. - Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paihfa a, hnim te tihfa bawk tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tihna a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tihfa that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui haww luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi rannung)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a samrawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih baw tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu ranning)	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Kolasib

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	9	12	20	8	3
Max Temp (°C)	30	30	30	31	31
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	99	99	99	100	98
Min RH (%)	58	81	94	97	76
Wind Speed (Kmph)	4	4	3	0	2
*Wind Direction	S-E	S-E	S-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- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

Weather summary of the past three days

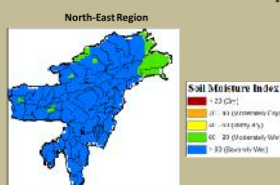
The temperature range for maximum and minimum were 28.5-29.6°C and 22.5-23.4°C respectively. Mainly cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 91-92% & minimum of 84-96%. Rainfall recorded for the past three days is **11.60 mm. (Source-mosdac.gov.in)**

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-31°C and 24-25°C. Maximum relative humidity is expected in the range of 98-100% and minimum may from 58-94%. Wind direction would be southeasterly to easterly and southeasterly with the wind speed of 0-4 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 52.0 mm

NDVI for Mizoram



Extremely wet condition of soil moisture is observed over entire districts of North-East Region.

Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lt or bactericides Blitox 50 WG @ 0.01g/lt can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage	KOLASIB	coincides with I Fortnight of July. ✚ Cleaning near base of the plant and cut unwanted branches. ✚ Application of split dose of fertilizer 600: 200:100 (g/pt). ✚ 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. ✚ Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage	MAMIT	✚ Clear near base of the plant and cut unwanted branches. ✚ Application of split dose of fertilizer 600: 200:100 (g/pt). ✚ 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.
		Banana Rhizome weevil	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✚ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage	LAWNGTLAI	✚ Fruits usually mature in 120 to 140 days after flowering. ✚ The fruit bunch is harvested when the ridges on their surface changes from angular to round. ✚ The dried parts of flowers at the top of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- fruit drop off easily. - The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	- the plant and cut dead branches. - Earthing up soil at base of the plant along with split doses of fertilizer. - Proper drainage is required to avoid water logging. - Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	- Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application - Weeding can be done by hoeing as and when necessary. - Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. - Harvest all mature fruit.
		Fruit fly	In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	- Remove unwanted plant near base of the plant and cut dead branches. - Earthing up soil at base of the plant along with split doses of fertilizer. - Proper drainage is required to avoid water logging. - Harvest all mature fruit.
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	- Remove unwanted plant near base of the plant and cut dead branches. - Earthing up soil at base of the plant along with split doses of fertilizer. - Proper drainage is required to avoid water logging. - Mulching with black polythene is found



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			beneficial for both reducing the weed and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		Shoot and fruit borer	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	LUNGLEI	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage		✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Maize	Tassling and silking stage		- Remove unwanted plant near base of the plant and cut dead branches. - Earting up of soil along with fertilizer mixture. - Apply split dose of fertilizer.
		Maize cob borer	Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. - Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		- Remove unwanted plant from the base of the plant. - Earthing up near base of the plant. - Remove all infected plant and burn it.
		Aphid and bug	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			6 month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Kolasib

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/Mizo

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	9	12	20	8	3
Max Temp (°C)	30	30	30	31	31
Min Temp (°C)	24	24	24	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	99	99	99	100	98
Min RH (%)	58	81	94	97	76
Wind Speed (Kmph)	4	4	3	0	2
*Wind Direction	S-E	S-E	S-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- May 1-31, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm (341.8mm)	Champhai- 239.49mm (250.30mm)	Saiha- 109.52 mm (87.2mm)	Kolasib- 352.38mm (380.9mm)
Lawngtlai-321.51mm (285.5mm)	Lunglei-344.00mm (186.21mm)	Mamit-449.48mm (442.80mm)	Serchhip-411.72mm (259.63mm)

Ni thum kalta sik leh sa dinhmun tlangpui

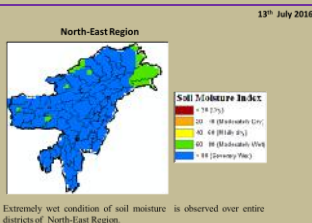
Khua a lum lai berin 28.5-29.6°C leh a vawh lai berin 22.5-23.4°C ani a. Chhum a tam tlangpui. Thli tleh dan kawng zawng chu chhim lam atangin chhak lamah a tleh (a thaw) a ni. Boruak uap zawng (relative humidity) san lai berin 91-92% a ni a, a hniam lai berin 84-96% ani. Ni 3 kal ta chhung a ruah tla zat chu **11.60 mm** a ni.
(Source- Mosdac.gov.in)

23th - 27th June, 2016 chhunga sik leh sa dinhmun tur tlangpui

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 30-31°C a ni ang a. A vawh lai berin 24-25°C ni tura beisei a ni. RH san lai berin 98-100% leh a hniam lai berin 58-94% ni tur a rin niin. Thli hi darkar khatah 0-4 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 52.0mm

NDVI for Mizoram



Extremely wet condition occur in all district of Mizoram



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	Phun sawn (transplant) hun		- Heng ser tiak te hi Ni zung hmuh thatna, thli laka him hmunah phun tur a ni. - Chin hunbi bik a awm lem lo a, April/May vel hi duhthusam a ni. - Kung lian deuh chi 12-25ft inkar hlat a chin tur a ni a, kung te deuh chi erawh 6-10ft inkar hlata chin tur a ni. Kung puitling a len poh leh an inkar tih hlat tur a ni. - Tui tling insah vat theih lohna hmun (ruah sur zawha tui a tlin rei thinna hmun) ah chuan ser tiak chu hmun tih pawn chawp ah phun tur a ni. - Ser tiak phun lo a, a chi a chin duh chuan ser rah duhthusam atangin a chi lak tur a ni. A chi chu zankhuain tuiah chiaah tur a ni a, A tukah Lei hnawng awmna pot (moist pot) ah ½ inch vela thukah tuh tur a ni. Pot chu plastic bag emaw, sarangin emaw tuam a, Ni zung hmuh thatna leh hmun lumah a rawn to chhuah hma chu dah tur a ni. Chumi zawhah a tuamna chu phelh a, ni hmuh thatna hmuna dah leh tur a ni.
		Citrus Cancar	- Tui litre khatah Copper Oxy Chloride 50%WP hi 2g emaw Blitox 50WG 0.01g hi emaw pawlh a, chu tui chu kung hrisel ah kah hian Citrus Cancar natna a veng thei a, he natna veisa kung ah chuan hman loh tur a ni thung. - Kung tlemte chauhin he natna an



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	Par a chhuah hma		✚ A kung bul vel tihfai a, a zar tangkai lo/zar ro te paih tur a ni. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ Micro-nutrients (zinc, copper, boron, manganese, iron leh molybdenum) te hi pek thin tur an ni. Pek that loh chuan huan pumpui chhiatna a thlen thei a ni. ✚ Oil palm rah te hi a rah a hmin hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai		✚ Balhla kung bul vel ✚ tihfai a a hnah ro te thlak bawk tur. ✚ Kung khatah 600:200:100 (NPK) hi hmun hnihah thena apply tur a ni. ✚ 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.
		Banana Rhizome weevil	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		Banana panama wilt	ber a ni tlangpui). ✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	KOLASIB	✚ Balhla hi a par atanga ni 120-140 inkarah a hmin tlangpui. ✚ A raha kil a reh hnu, a mam pal hunah seng chauh tur a ni. ✚ Balhla bu a puitlin tawh chuan a hnah chung ber a ro tan thin.
		Banana fruit caterpillar	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Sapthei	Par a chhuah hma	MAMIT AIZAWL CHAMPAI SERCHHIP	✚ A bulhnai vel tihfai that tur. ✚ Khaw ro lai chuan a zung bulah lei rihvur a, hnimhnah dah bawk tur a ni. ✚ Zingkar leh tlai lama Ni a hmuh that theihnan Hmarthlang lam hawitir tur a ni. ✚ A zar no ho a zamna tur siam mumal tur.
		Aphid	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw, acephate 1.0g emaw dimethoate 2ml emaw, tui litre khatah pawlh a, kah tur.
Lakhuihthei	A par lai	LUNGLEI LAWNGTLAI SAIHA	✚ Thlaiin hnah 32 a neih hunah a par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) tlai lamah pek tur. ✚ Chemical pek atangin ni 55-60 chungin a par a chhuah thei ang. ✚ Thlai pakhat ah leitha 60:50:60g (NPK) hi hmun hnihah thenin pek tur. ✚ Thlai hnah leh a zar thi te chu



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			paih fai a, hnim te tih fai baw k tur a ni.
	A seng hunlai	KOLASIB	- A rah mawng lampang rangkachak rawng eng (golden yellow) a rawn nih chuan seng a hun tan tih na a ni. - Local market (khawchhunga hralh nghal tur) atan chuan a hmin tan lek lek ah seng tur. - Thawnchhuah tur atan erawh chuan a rawng a eng (yellow) hma hretah seng tur a ni.
Colocasia	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- A bul vel tih fai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah baw k a ni.
		Corm borer SERCHHIP	Thlai bul (plant base) ah rannung tui hmuh a nih chuan ram hectare khat hmunah Carbofuran 3G 1.5kg a.i hi thlai zung bulah hman tur a ni.
Cucurbitaceous crops	A seng hun	LUNGLEI	- A to tirh atanga a seng hun inkarah thlai pakhat tan NPK (100:200:100g) pek tur a ni. - Tuthlawh hmangin hnim thlawh mai tur a ni. - Fur laia a rah tawih loh nan a zar chu mauin emaw dokan tur a ni. - A rah puitling ho chu seng nghal zel tur a ni.
		Fruit fly LAWNGTLAI SAIHA	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng		A hnah ro vel pawhthlak a, a kung bul vel tih fai baw k tur a ni.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	- A kung bul rihvur tur a ni a, leitha vawi hnih pek bawk tur a ni. - Ruahtui tling a awm loh nan tui luankawr mumal siam tur a ni. - A rah puitling apiang seng zel tur a ni.
		Okra leafroller	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Behlawi	Rah a chhuah tan atanga seng hun thleng	MIZAWL CHAMPAI SERCHHIP	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk phah bawk a ni. - A rah puitling apiang seng zel tur.
Bawkbawn	Rah a chhuah tan atanga seng hun thleng	LUNGLEI LAWNGTLAI SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - Thali a to hmain Basalin 0.5ml tui litre khatah pawlh a, leia kah hian grass lampang chi hnim to tam tur a veng. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, thlai thang a tichak bawk. - Ram Hactare khata zauah leitha Urea 50kg hi hmun hnihah thenin vawihnih phul tur a ni. - A rah puitling apiang seng zel tur.
	Shoot and fruit borer (thlai kung leh a rah bawm)		- Natna in a tihchhiat tawh thlai peng lakthlak a paih tur. - Rannung hlo imidacloprid 0.5ml



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	chi rannung)		emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
		Brinjal leaf beetle	✚ Rannung thahna hlo Acephate (Orthene) emaw carbaryl (Sevin)emaw fipronil (Over 'N Out) emaw pyrethrins emaw, 1-1.5ml hi tui litre khatah pawlh a, kah tur.
Kharif rice (Buh fur laia chin chi)	Phun sawn hunlai		✚ Hnah 3-5 nei natna kai lo chauh a tiak phuntur atan lak tur. ✚ Bavistin 50WP hi tui litre khatah 2g pawlh a, kah tur. ✚ Buh phunna tlar leh tlar inkar 20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Pre-Kharif rice (Buh fur hma hreta chin chi)	A peng insiamtur zawng zawng insiam zawh hnu lawk		✚ A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. ✚ Leitha vawihnih pek tur. ✚ Tui tling tur vennisan tui haw luanna mumal tak siam tur.
		Rice yellow stem borer	✚ Buh tiak a a hnah hmawr tanbun tur. ✚ Natna kai tawhna peng te lakthlak a, paih tur. ✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vaimim	A kawm insiam leh a sam rawn chhuah hunlai		✚ A bul vela hnim leh thlaidang lo to ve palh te paih a, a hnah rote paih bawk tur. ✚ Leitha nen rihvur tur. ✚ Natna kai ho lakkhawma halral tur.
Sawhthing leh Aieng	Par a chhuah hma		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



		KOLASIB	tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha ⁻¹ Metolachlor (Dual) @1.5-2.0 kg a.i ha ⁻¹ , Pendimethalin (Stomp) @ 1-1.5kg a.i ha ⁻¹ te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu ranning)	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif pulses (Green gram, Black gram and Rajma)	Par a chhuah tan lai	CHAMPA	✚ A bul vela hnim leh thlaidang lo to ve te that a paih tur. ✚ A kung bulah rih vur tur. ✚ Natna kai tawh thlai te lakkhawm a halral tur.
		Aphid and bug	✚ Ranning hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Vawk	Kumtluanin	Porcine Reproductive Respiratory Syndrome (PRRS).	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	Swine fever.	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	Kumtluanin	Foot and Mouth Disease (FMD)	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.
	A naupan lai	Black Quarter (BQ)	• Black Quarter Vaccine (BQ) ✚ Thla ruk an tlin hunah vaccine lak tan tur. ✚ Kumkhat hnu ah vaccine pek leh tur.
Ar	Kumtluanin	Ranikhet Disease.	1. Ar note an pian hlimin F ₁ vaccine pek tur a nia an puitlin hunah R ₂ B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			tur.
--	--	--	------





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishnaiari@rediffmail.com
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer	boramonika@rediffmail.com

Collaborating Department:

Dr. Lalmuanzovi	:	PC KVK Lunglei	kvklunglei@gmail.com kvknahtial@gmail.com
Mr. C. Lalthlamuana	:	PC KVK, Kolasib	kvkkolasib@gmail.com
Mrs. Lalnunpui Parte	:	PC KVK, Serchhip	Mmami997@yahoo.com kvkserchhip@gmail.com
Ms. Lalrinawnri Renthlei	:	PC KVK, Champhai	pckvkkhawzawl@rediffmail.com
Mr. Lalrosanga Khiangte	:	PC KVK, Lawngtlai	vvl9@rediffmail.com kvklawngtlai@rediffmail.com
Ms. C. Racheal	:	PC KVK, Saiha	kvksaiha@gmail.com rachoza@gmail.com
Mr. Vanlalhruaia Hnamte	:	PC KVK, Mamit	kvkmamit@yahoo.in
Dr. K. P. Chaudhary	:	PC KVK, Aizawl	Kpchy@rediffmail.com kvkaizawl@rediffmail.com



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Lawngtlai

Period: 23 July - 27 July, 2016

Bulletin No: - 621/2016/ Bulletin/English

Date of issue: 22th July, 2016

Parameters	23.07.2016	24.07.2016	25.07.2016	26.07.2016	27.07.2016
Rainfall (mm)	4	7	10	19	7
Max Temp (°C)	30	30	29	29	31
Min Temp (°C)	24	24	25	25	25
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	95	95	96	97	97
Min RH (%)	74	61	84	92	68
Wind Speed (Kmph)	4	4	4	2	3
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- June 1-30, 2016 (Percent of deviation from normal in parenthesis)

Aizawl- 384.87mm (430.2mm)	Champhai- 105.48mm (359.89mm)	Saiha- 307.40 mm (507.7mm)	Kolasib- 236.00mm (428.1mm)
Lawngtlai-291.20mm (453.1mm)	Lunglei-326.00mm (465.14mm)	Mamit-204.87mm (442.80mm)	Serchhip-411.72mm (259.62mm)

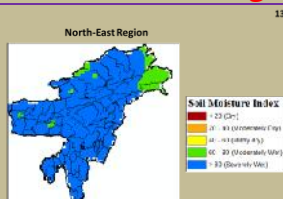
Weather summary of the past three days

Weather forecast valid from 23th June, 2016 To 27th June, 2016.

There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 29-31°C and 24-25°C. Maximum relative humidity is expected in the range of 95-97% and minimum may from 61-92%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 47.0 mm

NDVI for Mizoram



Extremely wet condition of soil moisture is observed over entire districts of North-East Region.

Extremely wet condition occur in all district of Mizoram

Main Crop/	Stage	Cultural	Agricultural / Horticultural/ animal
-------------------	--------------	-----------------	---



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Animal / Fisheries		practices/ Pest/ Diseases	husbandry advisories
Khasi Mandarin and acid lime	Transplanting stage		- Citrus trees should be planted in a sunny and wind-protected area. - In the citrus belt, trees can be planted at any time, however, spring is the best time for container grown plants. - Standard-size trees should be spaced 12 to 25 feet apart and dwarf trees should be set 6 to 10 feet apart. The exact distance depends on the variety. The bigger the fruit, the farther the distance. - If the soil is not well-drained, plant the trees on a slight mound to prevent water logging. - To plant citrus trees inside from seeds, remove the seeds from the desired fruit. Soak the seeds overnight in water and plant them ½ inch deep in moist potting soil. Cover the pot with a plastic bag or wrap and let it sit in a warm and sunny spot for a few weeks until the seeds start to grow. Then, remove the plastic but keep the pot near a warm and sunny window.
		Citrus cancar	- Copper- based fungicides Copper Oxy Chloride 50%WP @ 2g/lit or bactericides Blitox 50 WG @ 0.01g/lit can provide a barrier against infection, but they will not treat an existing infection. - Control minor infections limited to a small area of the tree by pruning away the affected parts. - Severely infected trees should be destroyed to prevent infecting healthy trees nearby.
		Citrus leafminer and butterfly	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with 1st Fortnight of July.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Oil plam	Vegetative stage		- Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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. - Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Flowering stage		- Clear near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - 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.
		Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Banana	Maturity stage		- Fruits usually mature in 120 to 140 days after flowering. - The fruit bunch is harvested when the ridges on their surface changes from angular to round. - The dried parts of flowers at the top of fruit drop off easily.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			- The top most leaf starts drying as the bunch matures. - Colour of fruits or fingers changes from dark green to pale green.
		Banana fruit caterpillar	Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Passion Fruit	Vegetative stage		- Trail semi hard wood stem to bower structure - Clean near the base of the plant. - In dry spell apply mulch with grass. - Trellises are in the north-south direction to minimize the shades during early morning and late evening. - Young vines are trained to grow along the wire support of the trellises.
		Aphid	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pineapple	Flowering stage		- Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04% Sodium Carbonate) should be applied in the heart of the plant. In evening and only when plants have at least 32 leaves. - The flowering emergence will come out after 55-60 days after chemical spraying. - Apply split doses of fertilizer @ 60: 50:60 g per plant. - Remove all unwanted leaves, branches and weed near to the plant.
Pineapple	Harvest stage		- A basal golden yellow coloration at the base is the sign of a ripe fruit. - Fresh fruits destined for the local market are plucked when almost ripe. - Fresh pineapples destined for export are harvested green-ripe (beginning to turn yellow-green at the base of the fruit).
Colocasia	Vegetative		Remove unwanted plant near base of the plant and cut dead branches.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	stage	KOLASIB	✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed and increasing the yield.
		Corm borer	✚ Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg laying ooze is observed at plant base.
Cucurbitaceous crop	Harvesting stage	MAMIT AIZAWL	✚ Apply a dose of 100:200:100 gm NPK/plant throughout the cropping period through split application ✚ Weeding can be done by hoeing as and when necessary. ✚ Fruit rot during rainy season can be checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Vegetative to flowering stage	LUNGLEI	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Harvest all mature fruit.
		Okra leafroller	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/l of water.
Cowpea	Fruit initiation to harvest	LAWNGTLAI SAIHA	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Earthing up soil at base of the plant along with split doses of fertilizer. ✚ Proper drainage is required to avoid water logging. ✚ Mulching with black polythene is found beneficial for both reducing the weed



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Fruit initiation to harvest	KOLASIB	✚ Remove unwanted plant near base of the plant and cut dead branches. ✚ Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. ✚ Mulching with black polythene film reduces weed growth, increases the crop growth. ✚ Split dose of fertilizer application @ 50kg/ha urea. ✚ Harvest all mature fruit.
		MAMIT	✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
		Shoot and fruit borer	
		Brinjal leaf beetle	✚ Apply contact insecticide like Acephate (Orthene), carbaryl (Sevin), fipronil (Over 'N Out), pyrethrins @ 1 to 1.5 ml/lit of water.
Kharif Rice	Transplanting stage	SERCHHIP	✚ Select disease free seedling with 3-5 leaf stage. ✚ Treat seedling with Bavistin 50 WP @ 0.1% (2 g/lit) solution. ✚ Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops. ✚ Transplanting two to three seedlings per hill under normal conditions is enough. Remove the tip of rice seedling which reduces stem borer infestation.
Pre kharif Rice	Maximum tillering stage	LUNGLEI	✚ Remove unwanted plant by hand weeding. ✚ Apply split dose of fertilizer. ✚ Proper drainage is required to avoid water logging
		Rice yellow stem borer	✚ Cut leaf tip from the seedling. ✚ Collect and destroy infected parts of the plant. ✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Maize	Tassling and	LAWI	✚ Remove unwanted plant near base of



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	silking stage		the plant and cut dead branches. ✚ Earting up of soil along with fertilizer mixture. ✚ Apply split dose of fertilizer.
		Maize cob borer	✚ Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
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-1 in 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-1 large effective way for control of many annual and broad leaved weeds. ✚ Earting up of soil along with fertilizer mixture.
		Turmeric shoot borer	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Kharif pulses (Green gram, Black gram and Rajma)	Flower initiation stage		✚ Remove unwanted plant from the base of the plant. ✚ Earthing up near base of the plant. ✚ Remove all infected pant and burn it.
		Aphid and bug	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Pig	All stages	Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.



GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat





GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	:	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	:	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	:	Scientist (Plant Pathology)	ratantplantpatho@gmail.com
Dr. L. H. Puui	:	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr. M. Thoithoi Devi	:	Scientist (Agronomy)	
Mr. Samik Chowdhury	:	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Mr. Vanthawmliana	:	Senior Research Fellow (Mizo language Translator)	Tom_tom79@yahoo.in
Mrs. Monika Bora	:	Meteorological Observer (IMD)	boramonika@rediffmail.com

Collaborating Department:

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