



GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	4	8	7	6
Max Temp (°C)	30	32	32	32	33
Min Temp (°C)	23	24	24	24	24
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	99	100	98	99
Min RH (%)	79	67	78	88	64
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-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**

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

Maximum Tem. (°C):26-28°C
Minimum Tem. (°C): 21-23°C
Maximum RH (%):94-99%
Minimum RH (%):79-91%
Wind Direction: southwesterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 30-33°C a ni ang a. A vawh lai berin 23-24°C ni tura beisei a ni. RH san lai berin 98-100% leh a hniam lai berin 64-88% ni tur a rin niin. Thli hi darkar khatah 2 km vela chakin thlang lam leh chhak lam hawi zawngin a tleh rin a ni. Ni nga chung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

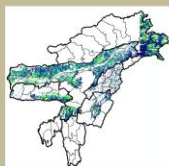
Rainfall: 98.6 mm

Weekly cumulative rainfall: 30.0mm

NDVI for Mizoram

North East Region

8 September 2016



< 0.2 bare soil / wet background
0.2 – 0.3 } Moderate
0.3 – 0.4 }
0.4 – 0.5 } Good
0.5 – 0.6 }
0.6 – 0.7 } Very Good
> 0.7 }

Agriculture vigour is good & very good over north-east states of country.

Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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



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			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 KOLASIB	✚ 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	A tet lai	MAMIT AIZAWL CHAMPAL SERCHHIP LUNGLEI	✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	Par a chhuah hma	LAWNGTLAI SAIHA	✚ 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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrh Saiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawhthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar

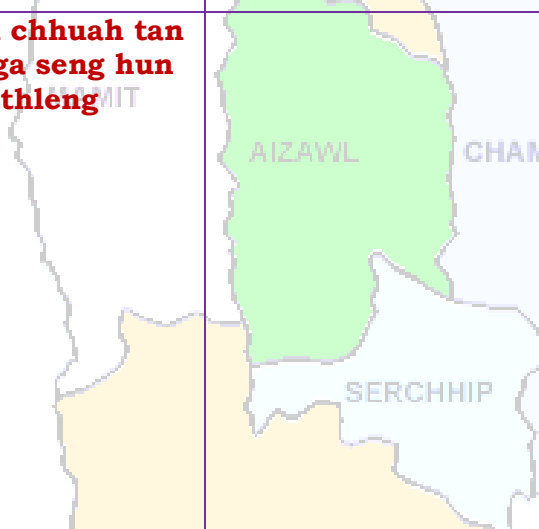
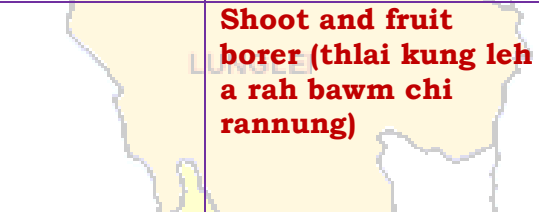


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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk 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 leh a rah bawm chi ranning) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		- 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 tur.



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District: Lawngtlai

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	8	3	3	0	5
Max Temp (°C)	32	32	33	33	33
Min Temp (°C)	23	23	23	24	24
Cloud Coverage	Partially clear	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	97	97	98	97	97
Min RH (%)	69	68	76	77	75
Wind Speed (Kmph)	3	2	2	3	3
*Wind Direction	S-E	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

Maximum Tem. (°C):24-26°C
Minimum Tem. (°C): 19-22°C
Maximum RH (%):97-100%
Minimum RH (%):76-94%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

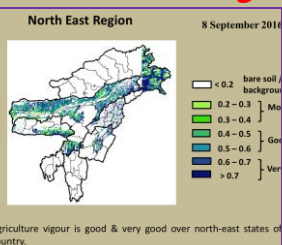
Rainfall: 69.2 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 4 days. The maximum and minimum temperatures for the next 5 days may range for 32-33°C and 23-24°C. Maximum relative humidity is expected in the range of 97-98% and minimum may from 68-77%. 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: 19.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



GRAMIN KRISHI 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	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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 beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		Rat damage LAWNGTLAI	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage		- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage		- 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 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.
Cucurbitaceo us crop	Harvesting stage		- 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



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			containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage	KOLASIB	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Keep dry fruits in sun for drying and store for next year
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Cowpea	Fruit initiation to harvest	AIZAWL	- 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 and increasing the yield. - Harvest all mature fruit.
Brinjal	Harvesting stage	SERCHHIP	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Extract seeds from full ripped or over matured fruit. - Keep extracted for sun dry and keep for next year.
		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.
Tomato	Nursery stage	Land preparation	- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m²) - Line sowing of seeds (7-10cm)



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		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	KOLASIB MAMIT AIZAWL	- 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/lt of water.
Pre kharif Rice	Panicle Emergence stage	SERCHHIP	- 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.
		Rice leafroller	- Stop indiscriminate use of fertilizer. - Use any systemic insecticide like Monocrotophos 1 ml/lt of water for light damage and 2 ml/lt of water for heavy damage.
Kharif Maize	Harvesting stage	LAWNGTLAI SAIHA	- Harvest all mature cobs. - Keep all mature cobs for sun dry. - After sundry hang all cobs in smoke for reduce maize weevil attack.
Kharif pulses (Green gram,	Harvesting		- Harvest all mature pods. - Keep all mature pods for sun dry.



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Black gram and Rajma) Soybean	stage		
	Sowing	Zero tillage	- Clean all debris from the <i>jhum</i> field. - Open the furrow with of dao or dibbler or khurpee. - Put recommended fertilizer dose and mix with soil. - Place two to three seeds per pocket with 30 cm row to row and 15 cm plant to plant distance.
		Aphid and bug	- Manually collect and destroy the insect. - 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	Pig disease	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.
		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). - Primary vaccination 6 month or above - Revaccination annually
Poultry	Litter management		- Maintain light 12-14 hrs in brooder house. - The litter should be 7.5- 10 cm deep. - Saw dust, paddy husk or ground nut hulls can be used as litter. - Add lime with Saw dust, paddy husk or ground nut for maintain moisture.



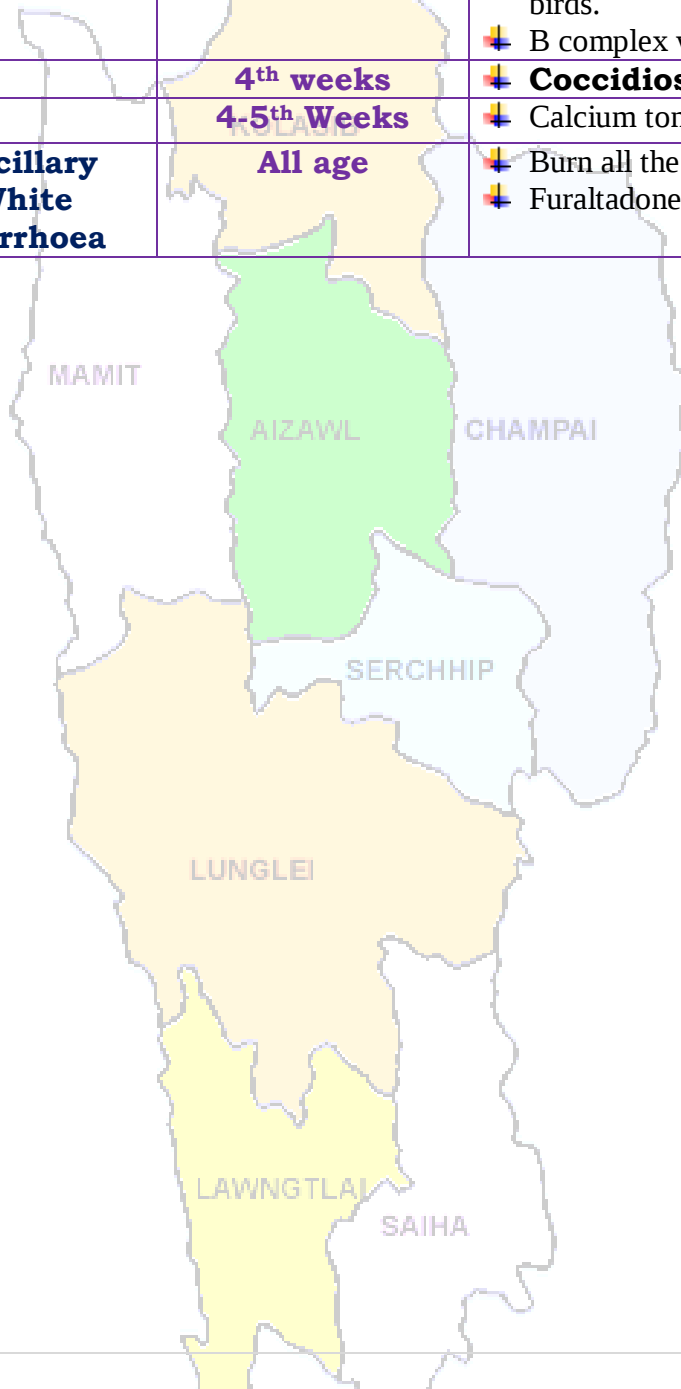
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	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B ₁₂
	Bacillary White Diarrhoea	All age	✚ Burn all the dead birds. ✚ Furaldone@ 0.5 g/litre of water for 7 days.





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District: Lawngtlai

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	8	3	3	0	5
Max Temp (°C)	32	32	33	33	33
Min Temp (°C)	23	23	23	24	24
Cloud Coverage	Partially clear	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	97	97	98	97	97
Min RH (%)	69	68	76	77	75
Wind Speed (Kmph)	3	2	2	3	3
*Wind Direction	S-E	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**

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

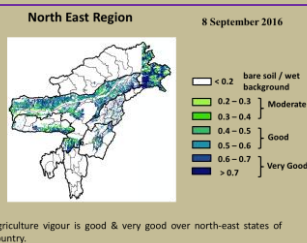
Maximum Tem. (°C):24-26°C
Minimum Tem. (°C): 19-22°C
Maximum RH (%):97-100%
Minimum RH (%):76-94%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

Ni 4 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 32-33°C a ni ang a. A vawh lai berin 23-24°C ni tura beisei a ni. RH san lai berin 97-98% leh a hniam lai berin 68-77% 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.

Rainfall: 69.2 mm

Weekly cumulative rainfall: 19.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions

Thlai/ ran	Spat zawng	Hmalakna tur/	Agricultural/Horticultural/ animal
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/sangha		rannung leh natna hrik awm thei te	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 vei chuan a natna kai ho chu kung



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			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	A tet lai		✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzat theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	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 hniah 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



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			hun, rawng mit la tak a rawn nih hunah seng tur a ni.
Balhla	A par lai	KOLASIB	- 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 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 hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
	A hmin hun	LUNGLEI	- 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai	LAWNGTLAI	- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a kunga chawrno (bud) 3 tal a keng



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		KOLASIB	tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber)\0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma	SAIHA	- A bul vel tihfai that a, a zar tangkai lo ho paih tur. - A zung bul rih vur a leitha



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		KOLASIB	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	✚ 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	MAMIT AIZAWL CHAMPAL	✚ 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	✚ Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng	LUNGLEI	✚ A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	✚ A bul vel tihfai that a, a zar tang kai lo ho paih tur.

	thleng		- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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 leh a rah bawm chi rannung)	- Natna in a tihchhiat tawh thlai peng 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.
		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



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			20cm, buh leh buh inkar 15cm hi hmun tha pangngai leh enkawl ulukna hmunah chuan a tawk vel a ni.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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



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



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



District: Lunglei

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	5	5	0	6
Max Temp (°C)	32	32	33	33	33
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	100	99	99
Min RH (%)	72	73	74	77	75
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	E	E	S-W	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

Maximum Tem. (°C): 19-22°C
Minimum Tem. (°C): 16-17°C
Maximum RH (%): 96-99%
Minimum RH (%): 78-90%
Wind Direction: Southeasterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

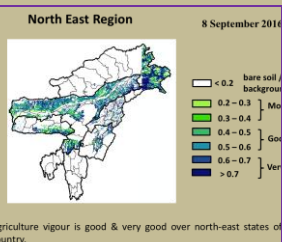
Rainfall: 109.5 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 4 days. The maximum and minimum temperatures for the next 5 days may range for 32-33°C and 23-24°C. Maximum relative humidity is expected in the range of 98-99% and minimum may from 72-77%. Wind direction would be easterly to southwesterly easterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 19.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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 beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		Rat damage LAWNGTLAI	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage	KOLASIB MAMIT AIZAWL	- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage	SERCHHIP	- 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 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.
Baibing (Local Vegetable)	Flowering to fruit formation stage	LUNGLEI	- Weed free near base of the plant. - Earthing of soil to the plant. - Apply split dose of fertilizer. - Apply 2g/pt when flower drop is observed.
Cucurbitaceus crop	Harvesting stage	LAWNGTLAI SAIHA	- 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



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			checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly KOLASIB	✚ 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	Harvesting stage		✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Keep dry fruits in sun for drying and store for next year
		Okra leafroller MAMIT AIZAWL CHALUKHIMP	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.
Cowpea	Fruit initiation to harvest		✚ 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 and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Harvesting stage	LUNGLEI	✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Extract seeds from full ripped or over matured fruit. ✚ Keep extracted for sun dry and keep for next year.
		Shoot and fruit borer LAWNGTLAI SAIHA	✚ 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.
Tomato	Transplanting stage		✚ Plant should be transplant at 4 leaf stage. ✚ Spacing: row to row-60cm and plant to plant- 45 cm.



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		KOLASIB	- Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Early Cole crop	Transplanting stage	Land preparation	- Plant should be transplant at 4 leaf stage. - Spacing: row to row-60cm and plant to plant- 45 cm. - Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed. - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	LAWNGTLAI	- 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



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			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.
Pre kharif Rice	Panicle Initiation to booting stage	KOLASIB	- 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.
Kharif Maize	Physiological maturity	MAMIT AIZAWL CHURACHANDPUR SERCHHIP	- Grain is not ready for safe storage Needs to be at 13-15% moisture for long-term storage May be advantageous to let crop partially dry in the field - Frost has no effect on yield at this point. However, lodging from disease, insect damage or can result in physical loss of yield.
		Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Keep the cobs in slender position from the stem. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Pig	All stages	LUNGLEI LAWNGTLAI SAIHA	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.



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		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Litter management		✚ Maintain light 12-14 hrs in brooder house. ✚ The litter should be 7.5- 10 cm deep. ✚ Saw dust, paddy husk or ground nut hulls can be used as litter. ✚ Add lime with Saw dust, paddy husk or ground nut for maintain moisture.
	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B₁₂
	Bacillary White Diarrhoea	All stage	✚ Burn all the dead birds. ✚ Furaltadone@ 0.5 g/litre of water for 7 days.



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GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	5	5	0	6
Max Temp (°C)	32	32	33	33	33
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy	Partially clear
Max RH (%)	98	99	100	99	99
Min RH (%)	72	73	74	77	75
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	E	E	S-W	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**

Maximum Tem. (°C): 19-22°C
Minimum Tem. (°C): 16-17°C
Maximum RH (%):96-99%
Minimum RH (%):78-90%
Wind Direction: Southeasterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

Rainfall: 109.5 mm

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

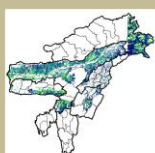
Ni 4 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 32-33°C a ni ang a. A vawh lai berin 23-24°C ni tura beisei a ni. RH san lai berin of 98-99% leh a hniam lai berin 72-77% ni tur a rin niin. Thli hi darkar khatah 2 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 19.0mm

NDVI for Mizoram

North East Region

8 September 2016



< 0.2 Bare soil / wet background
 0.2 – 0.3 Moderate
 0.3 – 0.4
 0.4 – 0.5 Good
 0.5 – 0.6
 0.6 – 0.7 Very Good
 > 0.7

Agriculture vigour is good & very good over north-east states of country.

Moderately wet mildly dry/mildly wet conditions



GRAMIN KRISHI 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



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			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 KOLASIB	✚ 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	A tet lai	MAMIT AIZAWL CHAMPAL SERCHHIP LUNGLEI	✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	Par a chhuah hma	LAWNGTLAI SAIHA	✚ 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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhaisaiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar

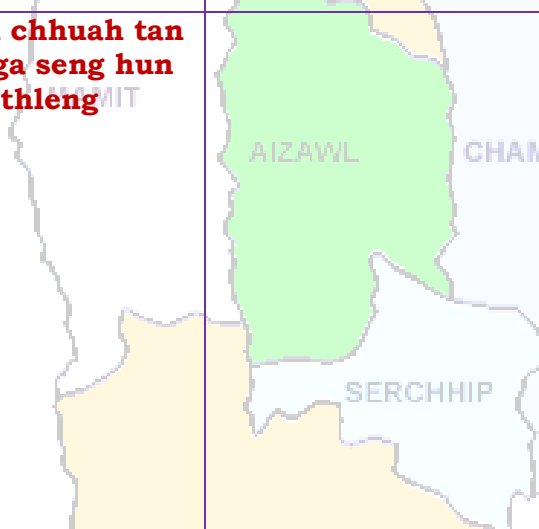
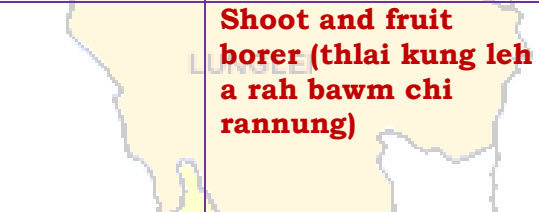


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Mizoram Centre, Kolasib- 796081, MIZORAM

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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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 leh a rah bawm chi rannung) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		✚ 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 tur.



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Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD,
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GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	3	6	6	4
Max Temp (°C)	33	33	33	33	34
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	97	98	99	98	99
Min RH (%)	72	62	76	85	62
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-E	S-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

Maximum Tem. (°C):26-29°C
Minimum Tem. (°C): 20-24°C
Maximum RH (%):99-100%
Minimum RH (%):75-95%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

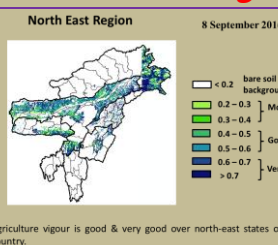
Rainfall: 130.8 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 33-34°C and 23-24°C. Maximum relative humidity is expected in the range of 97-99% and minimum may from 62-85%. Wind direction would be southeasterly to easterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 22.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



GRAMIN KRISHI 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	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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.
		AIZAWL 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.
		SERCHHIP Banana beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		LAWNGTLAI Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage		- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage		- 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 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.
Cucurbitaceo us crop	Harvesting stage		- 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



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			containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage	KOLASIB	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Keep dry fruits in sun for drying and store for next year
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.
Cowpea	Fruit initiation to harvest	AIZAWL	- 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 and increasing the yield. - Harvest all mature fruit.
Brinjal	Harvesting stage	SERCHHIP	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Extract seeds from full ripped or over matured fruit. - Keep extracted for sun dry and keep for next year.
		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.
Tomato	Nursery stage	Land preparation	- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m²) - Line sowing of seeds (7-10cm)



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		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	KOLASIB MAMIT AIZAWL	- 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/lt of water.
Pre kharif Rice	Panicle Emergence stage	SERCHHIP	- 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.
		Rice leafroller	- Stop indiscriminate use of fertilizer. - Use any systemic insecticide like Monocrotophos 1 ml/lt of water for light damage and 2 ml/lt of water for heavy damage.
Kharif Maize	Harvesting stage	LAWNGTLAI SAIHA	- Harvest all mature cobs. - Keep all mature cobs for sun dry. - After sundry hang all cobs in smoke for reduce maize weevil attack.
Soybean	Sowing	Zero tillage	- Clean all debris from the <i>jhum</i> field. - Open the furrow with of dao or dibbler



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			- or khurpee. - Put recommended fertilizer dose and mix with soil. - Place two to three seeds per pocket with 30 cm row to row and 15 cm plant to plant distance.
Kharif pulses (Green gram, Black gram and Rajma)	Harvesting stage	KOLASIB	- Harvest all mature pods. - Keep all mature pods for sun dry.
		Aphid and bug	- Manually collect and destroy the insect. - 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	Pig disease	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.
		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). - Primary vaccination 6 month or above - Revaccination annually
Poultry	Litter management		- Maintain light 12-14 hrs in brooder house. - The litter should be 7.5- 10 cm deep. - Saw dust, paddy husk or ground nut hulls can be used as litter. - Add lime with Saw dust, paddy husk or ground nut for maintain moisture.



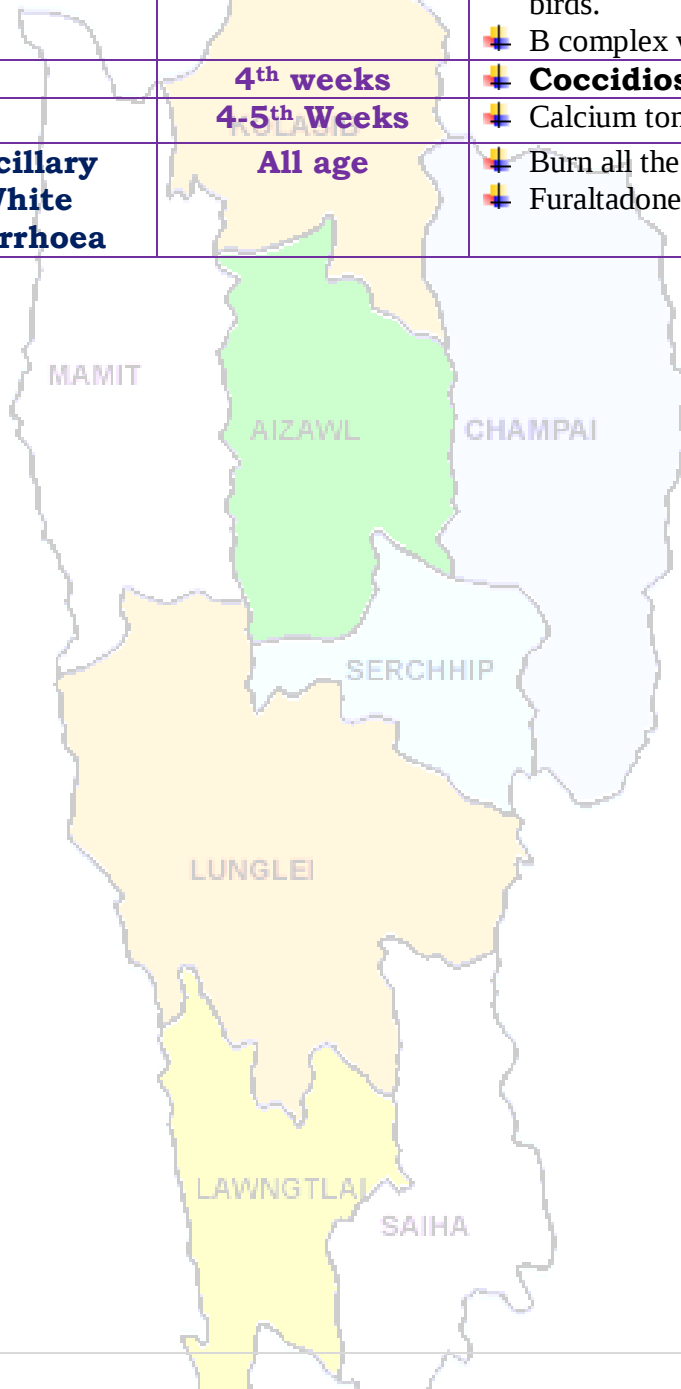
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	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B ₁₂
	Bacillary White Diarrhoea	All age	✚ Burn all the dead birds. ✚ Furaldone@ 0.5 g/litre of water for 7 days.





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GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	3	6	6	4
Max Temp (°C)	33	33	33	33	34
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	97	98	99	98	99
Min RH (%)	72	62	76	85	62
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-E	S-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**

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

Maximum Tem. (°C):26-29°C
Minimum Tem. (°C): 20-24°C
Maximum RH (%):99-100%
Minimum RH (%):75-95%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 33-34°C a ni ang a. A vawh lai berin 23-24°C ni tura beisei a ni. RH san lai berin 97-99% leh a hniam lai berin 62-85% 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.

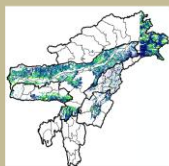
Rainfall: 130.8 mm

Weekly cumulative rainfall: 22.0mm

NDVI for Mizoram

North East Region

8 September 2016



< 0.2 bare soil / wet background
0.2 – 0.3 } Moderate
0.3 – 0.4 }
0.4 – 0.5 } Good
0.5 – 0.6 }
0.6 – 0.7 } Very Good
> 0.7 }

Agriculture vigour is good & very good over north-east states of country.

Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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



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			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 KOLASIB	✚ 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	A tet lai	MAMIT AIZAWL CHAMPAL SERCHHIP LUNGLEI	✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	Par a chhuah hma	LAWNGTLAI SAIHA	✚ 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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrh Saiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar

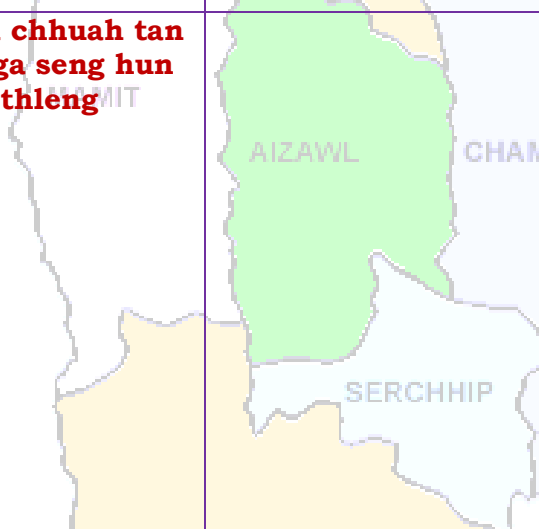
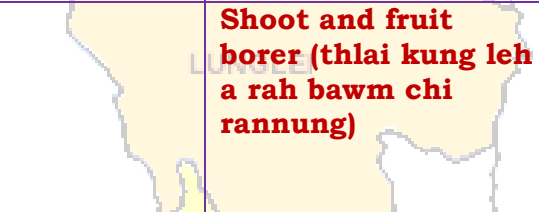


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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk 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 leh a rah bawm chi rannung) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		✚ 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 tur.



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ICAR RESEARCH COMPLEX FOR NEH REGION
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District: Saiha

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	6	7	4	8
Max Temp (°C)	32	32	32	33	33
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	100	100	100	100	100
Min RH (%)	80	80	81	87	81
Wind Speed (Kmph)	0	0	0	0	2
*Wind Direction	E	E	S-W	E	N-E

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

STATUS OF MONSOON- 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

Maximum Tem. (°C): 18-21°C
Minimum Tem. (°C): 15-17°C
Maximum RH (%):96-100%
Minimum RH (%):79-92%
Wind Direction: Southwesterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

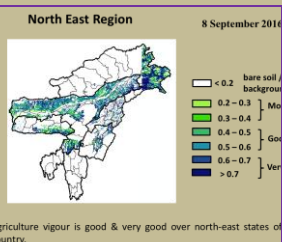
Rainfall: 95.2 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 32-33°C and 23-24°C. Maximum relative humidity is expected in the range of 100% and minimum may from 80-87%. Wind direction would be easterly to southwesterly to easterly and northeasterly with the wind speed of 0-2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 30.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0% - 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
			- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil AIZAWL	Apply insecticide like imidacloprid 0.5 ml or phosalone 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 beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		Rat damage LAWNGTLAI SAIHA	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage	KOLASIB MAMIT AIZAWL	- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage	SERCHHIP	- 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 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.
Baibing (Local Vegetable)	Flowering to fruit formation stage	LUNGLEI	- Weed free near base of the plant. - Earthing of soil to the plant. - Apply split dose of fertilizer. - Apply 2g/pt when flower drop is observed.
Cucurbitaceus crop	Harvesting stage	LAWNGTLAI SAIHA	- 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



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			checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly KOLASIB	✚ 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	Harvesting stage		✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Keep dry fruits in sun for drying and store for next year
		Okra leafroller MAMIT AIZAWL CHALUKHIMP	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.
Cowpea	Fruit initiation to harvest		✚ 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 and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Harvesting stage	LUNGLEI	✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Extract seeds from full ripped or over matured fruit. ✚ Keep extracted for sun dry and keep for next year.
		Shoot and fruit borer LAWNGTLAI SAIHA	✚ 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.
Tomato	Transplanting stage		✚ Plant should be transplant at 4 leaf stage. ✚ Spacing: row to row-60cm and plant to plant- 45 cm.



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		KOLASIB	- Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Early Cole crop	Transplanting stage	Land preparation	- Plant should be transplant at 4 leaf stage. - Spacing: row to row-60cm and plant to plant- 45 cm. - Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed. - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	LAWNGTLAI	- 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



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			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.
Pre kharif Rice	Panicle Initiation to booting stage	KOLASIB	- 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.
Kharif Maize	Physiological maturity	MAMIT AIZAWL CHURACHAND	- Grain is not ready for safe storage Needs to be at 13-15% moisture for long-term storage May be advantageous to let crop partially dry in the field - Frost has no effect on yield at this point. However, lodging from disease, insect damage or can result in physical loss of yield.
		Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Keep the cobs in slender position from the stem. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Pig	All stages	LUNGLEI LAWNGTLAI SAIHA	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.



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		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Litter management		✚ Maintain light 12-14 hrs in brooder house. ✚ The litter should be 7.5- 10 cm deep. ✚ Saw dust, paddy husk or ground nut hulls can be used as litter. ✚ Add lime with Saw dust, paddy husk or ground nut for maintain moisture.
	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B₁₂
	Bacillary White Diarrhoea	All stage	✚ Burn all the dead birds. ✚ Furaltadone@ 0.5 g/litre of water for 7 days.



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District: Saiha

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	6	7	4	8
Max Temp (°C)	32	32	32	33	33
Min Temp (°C)	23	23	24	24	24
Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	100	100	100	100	100
Min RH (%)	80	80	81	87	81
Wind Speed (Kmph)	0	0	0	0	2
*Wind Direction	E	E	S-W	E	N-E

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

STATUS OF MONSOON- 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

Maximum Tem. (°C): 18-21°C
Minimum Tem. (°C): 15-17°C
Maximum RH (%): 96-100%
Minimum RH (%): 79-92%
Wind Direction: Southwesterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

Rainfall: 95.2 mm

14th September– 18th September, 2016 chhunga sik leh sa dinhmun tur tlangpui

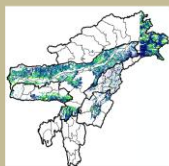
Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 32-33°C a ni ang a. A vawh lai berin 23-24°C ni tura beisei a ni. RH san lai berin 100% leh a hniam lai berin 80-87% ni tur a rin niin. Thli hi darkar khatah 0-2 km vela chakin chhaklam hawi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Weekly cumulative rainfall: 30.0mm

NDVI for Mizoram

North East Region

8 September 2016



< 0.2 bare soil / wet background
0.2 – 0.3 } Moderate
0.3 – 0.4 }
0.4 – 0.5 } Good
0.5 – 0.6 }
0.6 – 0.7 } Very Good
> 0.7 }

Agriculture vigour is good & very good over north-east states of country.

Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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

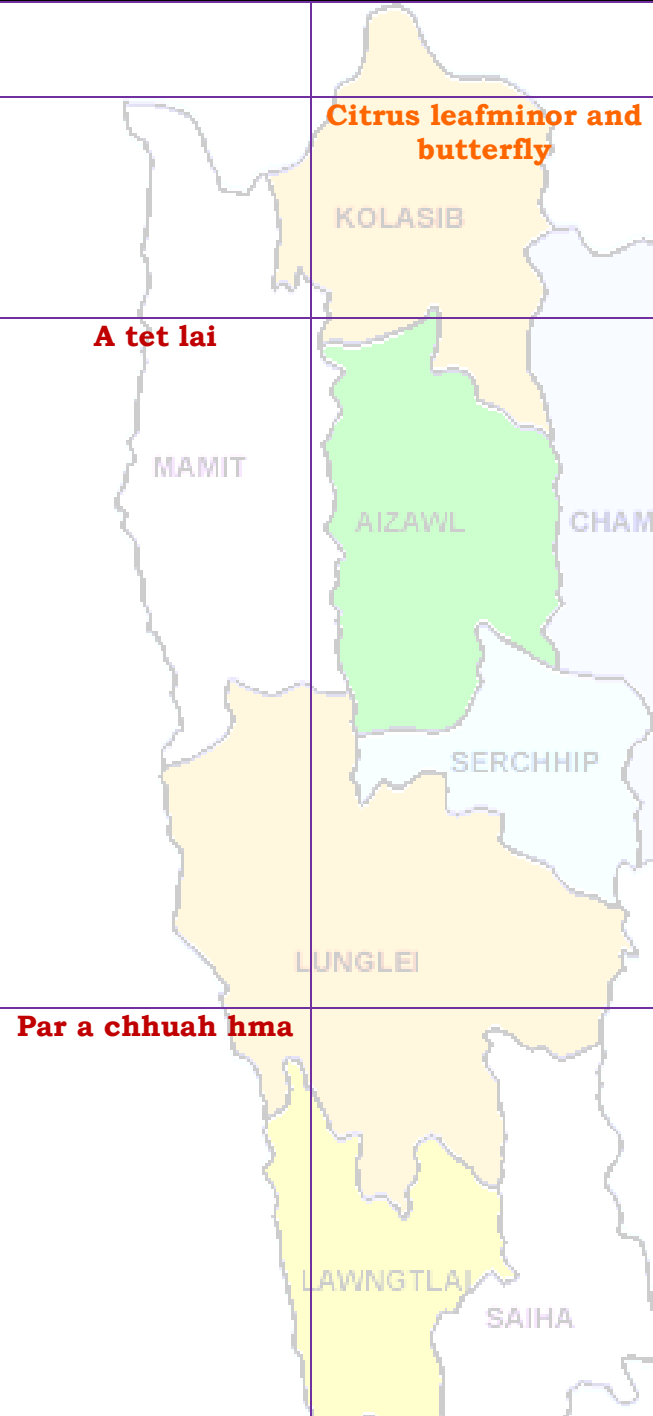


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			vei chuan a natna kai ho chu kung hrisel ho lak atanga hla deuh takah phun sawn mai tur a ni.
		Citrus leafminior and butterfly 	✚ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu rannung tui 50% a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
Oil Palm	A tet lai		✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrh Saiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar



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	atanga seng hun thleng		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 leh a rah bawm chi rannung) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		- 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 tur.



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GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	4	4	5	4
Max Temp (°C)	32	32	32	32	32
Min Temp (°C)	22	22	22	23	23
Cloud Coverage	Partially clear	Partially clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	99	99	99	99	99
Min RH (%)	71	71	81	82	81
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	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

Maximum Tem. (°C): 21-25°C
Minimum Tem. (°C): 18-20°C
Maximum RH (%):98-100%
Minimum RH (%):78-94%
Wind Direction: Southwesterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

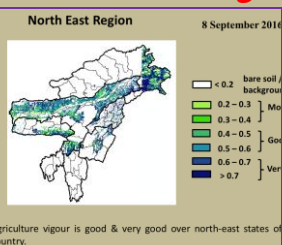
Rainfall: 100.2 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 32°C and 22-23°C. Maximum relative humidity is expected in the range of 99% and minimum may from 71-82%. Wind direction would be southeasterly to easterly and southeasterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 22.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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 beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		Rat damage LAWNGTLAI	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage		- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage		- 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 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.
Cucurbitaceo us crop	Harvesting stage		- 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



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			containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage	KOLASIB	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Keep dry fruits in sun for drying and store for next year
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Cowpea	Fruit initiation to harvest	AIZAWL	- 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 and increasing the yield. - Harvest all mature fruit.
Brinjal	Harvesting stage	SERCHHIP	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Extract seeds from full ripped or over matured fruit. - Keep extracted for sun dry and keep for next year.
		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.
Tomato	Nursery stage	Land preparation	- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m²) - Line sowing of seeds (7-10cm)



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		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	KOLASIB MAMIT AIZAWL	- 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/lt of water.
Pre kharif Rice	Panicle Emergence stage	SERCHHIP	- 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.
		Rice leafroller	- Stop indiscriminate use of fertilizer. - Use any systemic insecticide like Monocrotophos 1 ml/lt of water for light damage and 2 ml/lt of water for heavy damage.
Kharif Maize	Harvesting stage	LAWNGTLAI SAIHA	- Harvest all mature cobs. - Keep all mature cobs for sun dry. - After sundry hang all cobs in smoke for reduce maize weevil attack.
Soybean	Sowing	Zero tillage	- Clean all debris from the <i>jhum</i> field. - Open the furrow with of dao or dibbler



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			or khurpee. - Put recommended fertilizer dose and mix with soil. - Place two to three seeds per pocket with 30 cm row to row and 15 cm plant to plant distance.
Kharif pulses (Green gram, Black gram and Rajma)	Harvesting stage	KOLASIB	- Harvest all mature pods. - Keep all mature pods for sun dry.
		Aphid and bug	- Manually collect and destroy the insect. - 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	Pig disease	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.
		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). - Primary vaccination 6 month or above - Revaccination annually
Poultry	Litter management		- Maintain light 12-14 hrs in brooder house. - The litter should be 7.5- 10 cm deep. - Saw dust, paddy husk or ground nut hulls can be used as litter. - Add lime with Saw dust, paddy husk or ground nut for maintain moisture.



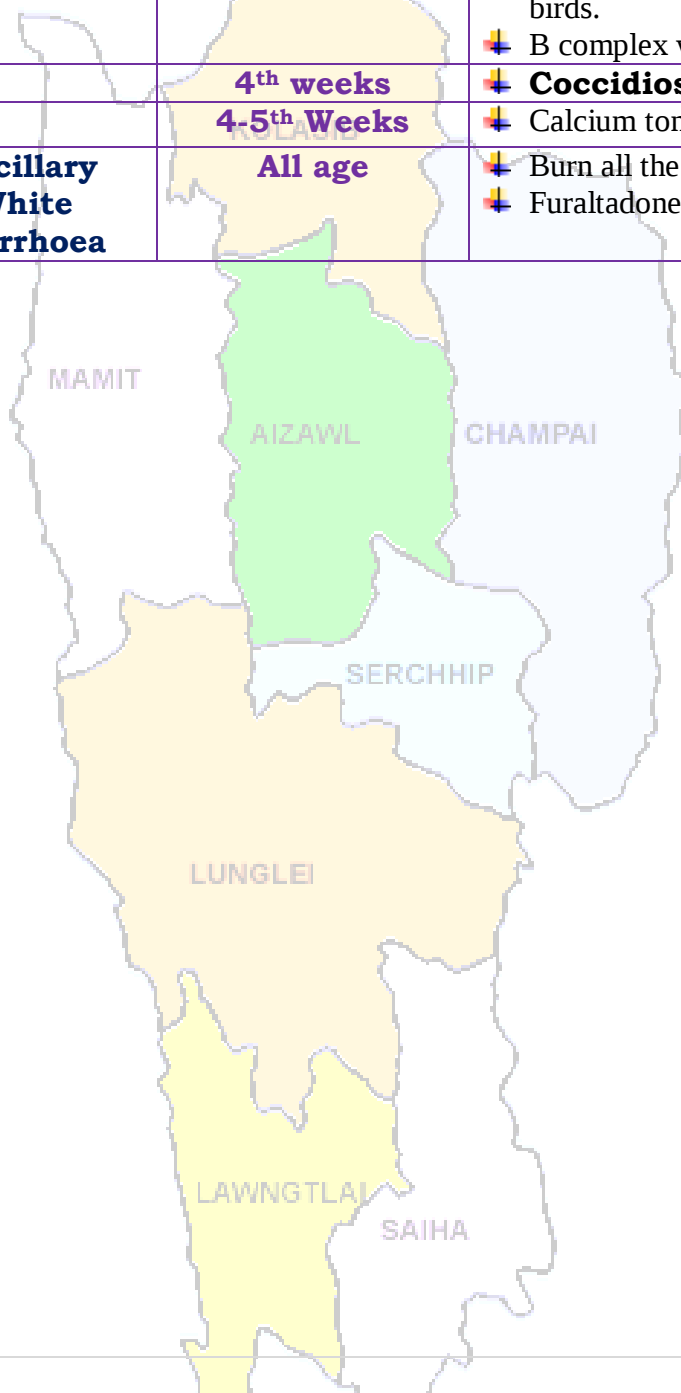
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	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B ₁₂
	Bacillary White Diarrhoea	All age	✚ Burn all the dead birds. ✚ Furaldone@ 0.5 g/litre of water for 7 days.





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District: Serchhip

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	4	4	5	4
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Max RH (%)	99	99	99	99	99
Min RH (%)	71	71	81	82	81
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	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**

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

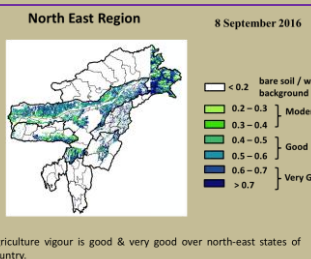
Maximum Tem. (°C): 21-25°C
Minimum Tem. (°C): 18-20°C
Maximum RH (%):98-100%
Minimum RH (%):78-94%
Wind Direction: Southwesterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

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 22-23°C ni tura beisei a ni. RH san lai berin 99% leh a hniam lai berin 77-82% 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.

Rainfall: 100.2 mm

Weekly cumulative rainfall: 22.0mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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



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			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 KOLASIB	✚ 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	A tet lai	MAMIT AIZAWL CHAMPAL SERCHHIP LUNGLEI	✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	Par a chhuah hma	LAWNGTLAI SAIHA	✚ 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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhsaiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar

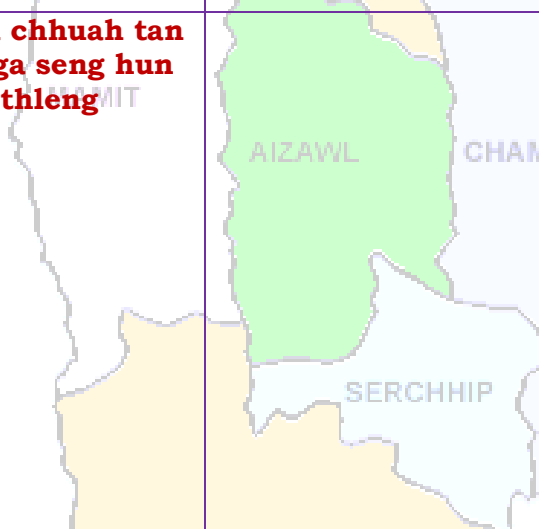
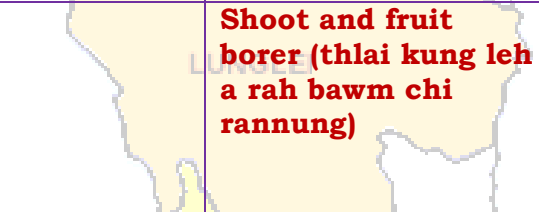


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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk 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.
			- Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennan tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		- 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 tur.



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



District: Aizawl

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	5	11	8	8
Max Temp (°C)	33	33	33	33	34
Min Temp (°C)	22	23	23	23	23
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	99	100	99	100
Min RH (%)	79	67	79	88	67
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-E	S-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

Maximum Tem. (°C):22-25°C
Minimum Tem. (°C): 19-21°C
Maximum RH (%):98-99%
Minimum RH (%):79-94%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

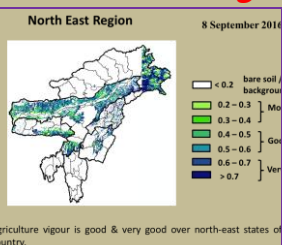
Rainfall: 89.3 mm

Weather forecast valid from 14th September, 2016 To 18th September, 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 33-34°C and 22-23°C. Maximum relative humidity is expected in the range of 98-100% and minimum may from 67-88%. Wind direction would be 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: 35.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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.
		AIZAWL 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.
		SERCHHIP Banana beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		LAWNGTLAI Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage		- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage		- 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 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.
Cucurbitaceo us crop	Harvesting stage		- 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



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			containing sugar or jaggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage	KOLASIB	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Keep dry fruits in sun for drying and store for next year
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Cowpea	Fruit initiation to harvest	AIZAWL	- 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 and increasing the yield. - Harvest all mature fruit.
Brinjal	Harvesting stage	SERCHHIP	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Extract seeds from full ripped or over matured fruit. - Keep extracted for sun dry and keep for next year.
		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.
Tomato	Nursery stage	Land preparation	- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m²) - Line sowing of seeds (7-10cm)



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		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	KOLASIB MAMIT AIZAWL	- 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/lt of water.
Pre kharif Rice	Panicle Emergence stage	SERCHHIP	- 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.
		Rice leafroller	- Stop indiscriminate use of fertilizer. - Use any systemic insecticide like Monocrotophos 1 ml/lt of water for light damage and 2 ml/lt of water for heavy damage.
Kharif Maize	Harvesting stage	LAWNGTLAI SAIHA	- Harvest all mature cobs. - Keep all mature cobs for sun dry. - After sundry hang all cobs in smoke for reduce maize weevil attack.
Soybean	Sowing	Zero tillage	- Clean all debris from the <i>jhum</i> field. - Open the furrow with of dao or dibbler



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			or khurpee. - Put recommended fertilizer dose and mix with soil. - Place two to three seeds per pocket with 30 cm row to row and 15 cm plant to plant distance.
Kharif pulses (Green gram, Black gram and Rajma)	Harvesting stage	KOLASIB	- Harvest all mature pods. - Keep all mature pods for sun dry.
		Aphid and bug	- Manually collect and destroy the insect. - 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	Pig disease	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.
		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). - Primary vaccination 6 month or above - Revaccination annually
Poultry	Litter management		- Maintain light 12-14 hrs in brooder house. - The litter should be 7.5- 10 cm deep. - Saw dust, paddy husk or ground nut hulls can be used as litter. - Add lime with Saw dust, paddy husk or ground nut for maintain moisture.



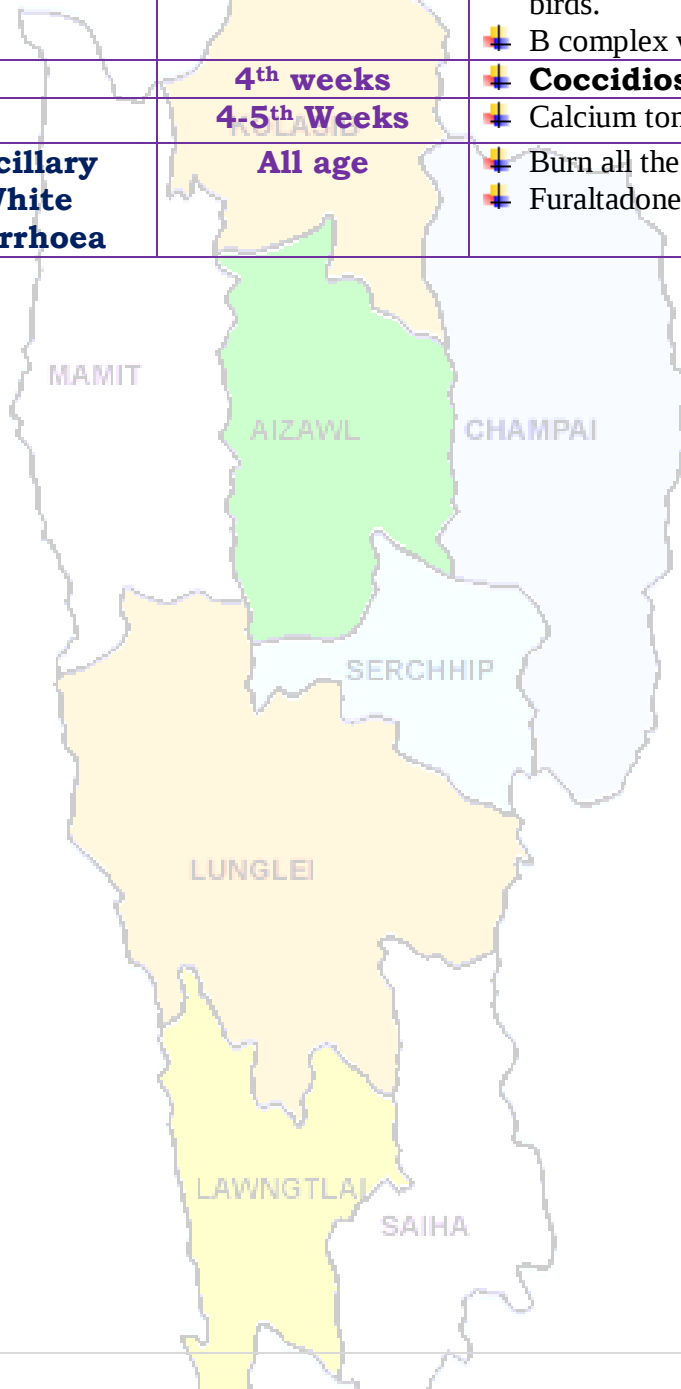
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	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B ₁₂
	Bacillary White Diarrhoea	All age	✚ Burn all the dead birds. ✚ Furaldone@ 0.5 g/litre of water for 7 days.





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District: Aizawl

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	3	5	11	8	8
Max Temp (°C)	33	33	33	33	34
Min Temp (°C)	22	23	23	23	23
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	99	100	99	100
Min RH (%)	79	67	79	88	67
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-E	S-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**

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

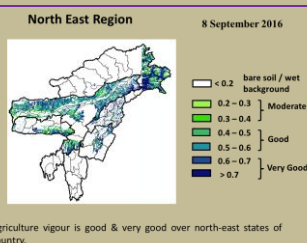
Maximum Tem. (°C):22-25°C
Minimum Tem. (°C): 19-21°C
Maximum RH (%):98-99%
Minimum RH (%):79-94%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 33-34°C a ni ang a. A vawh lai berin 22-23°C ni tura beisei a ni. RH san lai berin 98-100% leh a hniam lai berin 67-88% ni tur a rin niin. Thli hi darkar khatah 2 km vela chakin chhaklam awi zawngin a tleh rin a ni. Ni nga chhung lo awm tur ah hian a tlangpuiin chhum a lan deuh reng beisei a ni.

Rainfall: 89.3 mm

Weekly cumulative rainfall: 35.0mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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



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			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	A tet lai		✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrhaisaiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar



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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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 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 baw. - 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 chi rannung) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		✚ 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 tur.



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GRAMIN KRISHI 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: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	8	9	8	7	10
Max Temp (°C)	32	32	32	33	33
Min Temp (°C)	22	22	22	23	23
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	99	98	98	98	98
Min RH (%)	81	70	77	84	74
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-E	S	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

Maximum Tem. (°C): 24-26°C
Minimum Tem. (°C): 18-20°C
Maximum RH (%):96-100%
Minimum RH (%):76-97%
Wind Direction: Southeasterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

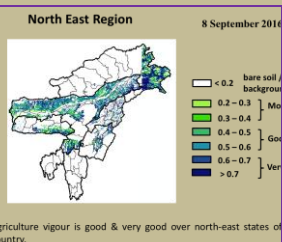
Rainfall: 124.6 mm

Weather forecast valid from 14th September, 2016 To 18th September, 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 32-33°C and 22-23°C. Maximum relative humidity is expected in the range of 98-99% and minimum may from 74-81%. Wind direction would be southeasterly to southerly 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: 42.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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.
		AIZAWL 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.
		SERCHHIP Banana beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		LAWNGTLAI Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage	KOLASIB MAMIT AIZAWL	- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage	SERCHHIP	- 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 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.
Baibing (Local Vegetable)	Flowering to fruit formation stage	LUNGLEI	- Weed free near base of the plant. - Earthing of soil to the plant. - Apply split dose of fertilizer. - Apply 2g/pt when flower drop is observed.
Cucurbitaceus crop	Harvesting stage	LAWNGTLAI SAIHA	- 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



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			checked by training the plants over the bamboo stick or dried branches. ✚ Harvest all mature fruit.
		Fruit fly KOLASIB	✚ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jaggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage		✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Keep dry fruits in sun for drying and store for next year
		Okra leafroller MAMIT AIZAWL CHAMPA	✚ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lt of water.
Cowpea	Fruit initiation to harvest		✚ 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 and increasing the yield. ✚ Harvest all mature fruit.
Brinjal	Harvesting stage	LUNGLEI	✚ Harvest all mature fruit. ✚ Keep over mature fruit for seed production. ✚ Extract seeds from full ripped or over matured fruit. ✚ Keep extracted for sun dry and keep for next year.
		Shoot and fruit borer LAWNGTLAI SAIHA	✚ 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.
Tomato	Transplanting stage		✚ Plant should be transplant at 4 leaf stage. ✚ Spacing: row to row-60cm and plant to plant- 45 cm.



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		KOLASIB	- Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Early Cole crop	Transplanting stage	Land preparation	- Plant should be transplant at 4 leaf stage. - Spacing: row to row-60cm and plant to plant- 45 cm. - Before transplant, seedling treated with 0.002% solution for 15 minutes. - Apply 120:80:60 kg NPK/ha in two split doses (50% at transplanting stage, 25% at vegetative stage and 25% at flowering stage).
		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed. - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	LAWNGTLAI	- 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



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			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.
Pre kharif Rice	Panicle Initiation to booting stage	KOLASIB	- 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.
Kharif Maize	Physiological maturity	MAMIT AIZAWL CHURACHANDPUR SERCHHIP	- Grain is not ready for safe storage Needs to be at 13-15% moisture for long-term storage May be advantageous to let crop partially dry in the field - Frost has no effect on yield at this point. However, lodging from disease, insect damage or can result in physical loss of yield.
		Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Keep the cobs in slender position from the stem. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Pig	All stages	LUNGLEI LAWNGTLAI SAIHA	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.



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		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	Litter management		✚ Maintain light 12-14 hrs in brooder house. ✚ The litter should be 7.5- 10 cm deep. ✚ Saw dust, paddy husk or ground nut hulls can be used as litter. ✚ Add lime with Saw dust, paddy husk or ground nut for maintain moisture.
	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B₁₂
	Bacillary White Diarrhoea	All stage	✚ Burn all the dead birds. ✚ Furaltadone@ 0.5 g/litre of water for 7 days.



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District: Champhai

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/Mizo

Date of issue: 13th September, 2016

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

**14th September– 18th September, 2016
chhunga sik leh sa dinhmun tur tlangpui**

Maximum Tem. (oC): 24-26oC
Minimum Tem. (oC): 18-20oC
Maximum RH (%):96-100%
Minimum RH (%):76-97%
Wind Direction: Southeasterly
Cloud cover: Mainly cloudy
Wind Speed: 3km/hr

Ni 5 lo awm turah hian ruahtui tam vak lo a tlak beisei a ni. Khua a lum lai berin 32-33oC a ni ang a. A vawh lai berin 22-23oC ni tura beisei a ni. RH san lai berin 98-99% leh a hniam lai berin 74-81% 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.

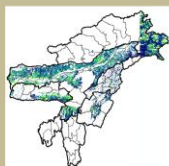
Rainfall: 124.6 mm

Weekly cumulative rainfall: 42.0mm

NDVI for Mizoram

North East Region

8 September 2016



Agriculture vigour is good & very good over north-east states of country.

Moderately wet mildly dry/mildly wet conditions



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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	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



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			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 KOLASIB	✚ 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	A tet lai	MAMIT AIZAWL CHAMPAL SERCHHIP LUNGLEI	✚ Polythene bag (a dum ni thei se) 23*13 cm a lian ah khawi tur a ni. ✚ Bag-ah chuan lei chung hang tha, lei pangngai leh ran ek a inzatz theuhin pawlh tur a ni a, 1cm vela khat loin chhun tur a ni. ✚ Oil palm tiak chu 2.5cm vela thuk in phum tur. ✚ Nitin tui pek tur. ✚ A tiak pakhat tan leitha SSP, MOP leh Mg_2SO_4 cawhpawlh 15g hi thlakhat a tlin hunah pek tur a ni a, 45g thlathum a tlin hunah leh 60g thlaruk a tlin hunah pek tur a ni. ✚ A vawikhat naah khian a kung atanga 6-8cm a hlaah pek tur a ni a, a vawihnihnaah 10-12cm a hla, vawithumnaah 15-20cm a hla ah pek tur a ni. ✚ Leitha pek dawn hian lei chung chu tlema rih phut deuh tur a ni.
	Par a chhuah hma	LAWNGTLAI SAIHA	✚ 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 hniah 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.



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			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 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.
		Banana thrips	A rah hunlaia polythene bag-a a kung tuam hian rannung thenkhat lakah a veng ve a ni.
Sapthei	Phunsawn hunlai		- Rah chhuah tha, virus kai lo thlan tur a ni. - Phunsawn atana kan lak hian a



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



		KOLASIB	kunga chawrno (bud) 3 tal a keng tel tur a ni. - Phun sawn veleh hian maul eh polythene a siam hmun uap tak tak (chamber) 0 ah dah tur a ni. Grafting (a kung zawm): - Sapthei chhung eng (yellow) hi polythene bag ah an phun a, Rahangala hybrid kung tantawi nen an zawm thin.
	Par a chhuah hma	MAMIT AIZAWL CHAMPAI	- 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 SERCHHIP	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 seng hunlai	LUNGLEI	- 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.
		Rat damage (Sazu in a tihchhiat) LAWNGTLAI SAIHA	- Sazu bu leh kua vel tihchhiat a, a hmun vel fai taka enkawl tur. - Sazu chaw vel a awm loh nan hnim vel tihfai that tur. - Sazu an tam viau chuan sazu tur 2% Zinc phosphide (96% buh nawi, 2% edible oil leh 2%ZnP) hman tur a ni.
Colocasia	Par a chhuah hma		A bul vel tihfai that a, a zar tangkai lo ho paih tur.



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		KOLASIB	- A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis 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	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	AIZAWL CHAMPAI	- 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	Huan zau deuhah chuan carbaryl 0.2% emaw malathion 0.15% hman tur a ni.
Bawrh Saiabe	A par hma deuh atang a par thleng	LUNGLEI	- A hnah ro vel pawthlak a, a kung bul vel tih fai bawk tur a 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	LAWNGTLAI SAIHA	A bul vel tihfai that a, a zar

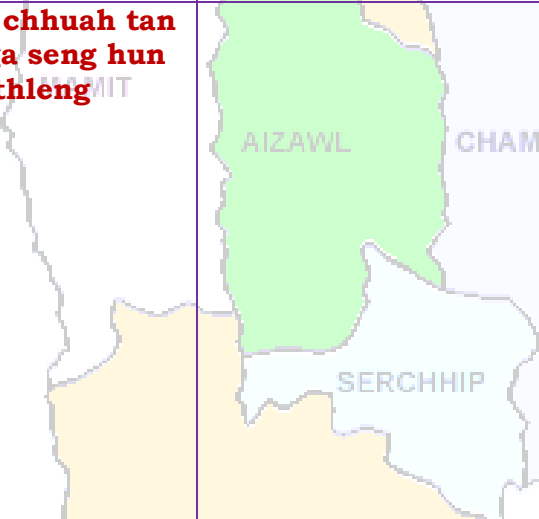


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	atanga seng hun thleng		tangkai lo ho paih tur. - A zung bul rih vur a leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luankawr mumal tak siam tur. - A zung bul vela Lei hi polythene duma khuh hian hnim to tur lakah a veng a, a thar hlawk 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 leh a rah bawm chi rannung) - Natna in a tihchhiat tawh thlai peng 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.
			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.



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			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.
Kharif rice	A peng insiamtur zawng zawng insiam zawh hnu lawk	KOLASIB	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
Pre Kharif Rice	A vui inseam tan lai	MAMIT	- A bul vela hnim leh thlaidang lo to ve palh te pawh thlawn tur. - Leitha vawihnih pek tur. - Tui tling tur vennis tui hawk luanna mumal tak siam tur.
		Rice yellow stem borer	- A hnah hmawr tan tur. - A kung hrisel lo lai paih tur - Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vaimim fur hma a seng chi	A seng hun	SERCHHIP	- A rah zawng zawng seng vek tur. - Keh hun zawng ni saah phoro tur. - Vaimim chi chu rapah rep tur.
Vaimim fur hma hreta seng chi	A kung puitlin hun	LUNGLEI	- A kung bul vela hnim vel tihfai that tur. - Leitha nena rihvur tur. - Leitha vawi hnih pek tur.
		Maize cob borer (vaimim kawm bawmtu rannung)	0.1% endosulfan {2ml (35EC)} hi tui litre khatah pawlh a, ni 30 hnuah vaimim hnahah kah tur.
Sawhthing leh Aieng	Par a chhuah hma	LAWNGTLAI SAIHA	- 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 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)



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			@ 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 atanga rah a chhuah thleng		✚ 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 tur.



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



District: Kolasib

Period: 14 – 18 September, 2016

Bulletin No: - 636/2016/ Bulletin/English

Date of issue: 13th September, 2016

Parameters	14.09.2016	15.09.2016	16.09.2016	17.09.2016	18.09.2016
Rainfall (mm)	5	4	8	7	6
Max Temp (°C)	30	32	32	32	33
Min Temp (°C)	23	24	24	24	24
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	99	100	98	99
Min RH (%)	79	67	78	88	64
Wind Speed (Kmph)	2	2	2	2	2
*Wind Direction	S-E	S-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

Maximum Tem. (°C):26-28°C
Minimum Tem. (°C): 21-23°C
Maximum RH (%):94-99%
Minimum RH (%):79-91%
Wind Direction: southwesterly
Cloud cover: Mainly cloudy
Wind speed: 3 km/hr

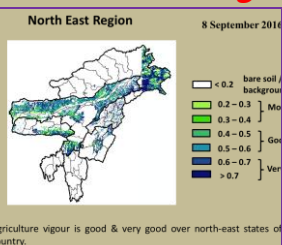
Rainfall: 98.6 mm

Weather forecast valid from 14th September, 2016 To 18th September, 2016.

There are chances of light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-33°C and 23-24°C. Maximum relative humidity is expected in the range of 98-100% and minimum may from 64-88%. Wind direction would be southeasterly to easterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 30.0 mm

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions



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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Flowering to fruit formation stage	Fruit fly Dia back disease	- In north-eastern parts of India, Khasi mandarins are very closely spaced (6 m. X 6 m.), accommodating more than 120 plants/ha. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Make a circle near to the plant and apply 25 kg FYM along with 20 g urea and 125 g SSP. - Remove all unwanted plants from near the base of the plant. - Care should be taken to avoid water stagnation in the bags.
			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.
Passion Fruit	Flowering to Fruit formation stage		- Remove all infected plant and burn it. - Pruning of effected part spraying with carbendazim/Bordeaux mixture 1.0%
			- 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. - Zinc + Manganese (1.3 kg Zinc sulphate, 900g manganese sulphate, 675g lime, 450 gm urea in 450 lit of water for one hectare area. - Apply 100: 50:100g as NPK per plant.
		Fruit fly	- Collect and burn all infected plant. - 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.



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Banana	Harvesting stage	KOLASIB	- Change of colour from green to yellowish. - Fingers are about three quarters full i.e. 3/4 of fruit is rounded - Ridges should still be prominent on the remaining quarter of the finger. - Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). - Too early (when the bananas are thin and dark green). - Too late (when they are thick and turning yellow).
		MAMIT Banana Rhizome weevil	Apply insecticide like imidacloprid 0.5 ml or phosalone 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.
		AIZAWL 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.
		SERCHHIP Banana beetle	- Removal of weeds from basin - Removal of unwanted sucker - Application of alphamethrin @ 0.01%.
Pineapple	Harvest stage	LUNGLEI	- 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).
		LAWNGTLAI Rat damage	- Disturb and destroy the habitat (burrows) of the rodents by practicing clean cultivation. - Minimize the alternate food sources and secured habitation by removing the weeds and crop residues in/ around the fields. - Apply 2% Zinc phosphide poison baits (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) when the rodent



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			infestation is very high. Practice pre-baiting before apply ZNP poison baiting to avoid the bait shyness.
Oil plam	Vegetative stage		- Time from flowering to harvesting of ripe fruit is 5-6 months. - Fruit brunch is tightly wedge in the leaf axil of the plam. - Brunch of a mature plam contains 1,000 to 4,000 fruits, depending on the trees agr and vigor. - Bunch weights at maturity 15-25 kg. - The percentage of fruits per bunch is usually 50-60%. - The egg shaped fruits weight 10-20 g. - The pulp around the nut contains the red palm oil. - The kernel in the nut contains oil very similar to coconut oil, but palm oil and palm kernel oil are chemically different.
Colocasia	Vegetative stage		- 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 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.
Cucurbitaceo us crop	Harvesting stage		- 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



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			containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Okra	Harvesting stage	KOLASIB	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Keep dry fruits in sun for drying and store for next year
		Okra leafroller	Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml/lit of water.
Cowpea	Fruit initiation to harvest	AIZAWL	- 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 and increasing the yield. - Harvest all mature fruit.
Brinjal	Harvesting stage	SERCHHIP	- Harvest all mature fruit. - Keep over mature fruit for seed production. - Extract seeds from full ripped or over matured fruit. - Keep extracted for sun dry and keep for next year.
		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.
Tomato	Nursery stage	Land preparation	- Nursery preparation for tomato. - Raised bed, nursery bed solarisation. - Bed should be 1m width and conventional length. - Application of FYM (1.5-2.0 kg/ m²) - Line sowing of seeds (7-10cm)



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		Damping off	- Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed - Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
Ginger and turmeric	Vegetative stage	KOLASIB MAMIT AIZAWL	- 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/lt of water.
Pre kharif Rice	Panicle Emergence stage	SERCHHIP	- 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.
		Rice leafroller	- Stop indiscriminate use of fertilizer. - Use any systemic insecticide like Monocrotophos 1 ml/lt of water for light damage and 2 ml/lt of water for heavy damage.
Kharif Maize	Harvesting stage	LAWNGTLAI SAIHA	- Harvest all mature cobs. - Keep all mature cobs for sun dry. - After sundry hang all cobs in smoke for reduce maize weevil attack.
Soybean	Sowing	Zero tillage	- Clean all debris from the <i>jhum</i> field. - Open the furrow with of dao or dibbler



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			- or khurpee. - Put recommended fertilizer dose and mix with soil. - Place two to three seeds per pocket with 30 cm row to row and 15 cm plant to plant distance.
Kharif pulses (Green gram, Black gram and Rajma)	Harvesting stage	KOLASIB	- Harvest all mature pods. - Keep all mature pods for sun dry.
		Aphid and bug	- Manually collect and destroy the insect. - 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	Pig disease	Illness in pigs characterized by dullness, in appetite, disinclination to move, rough coat with loss of bloom, constipation or diarrhoea. once the symptom are noticed, call veterinarian doctor.
		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	- Black Quarter Vaccine (BQV). - Primary vaccination 6 month or above - Revaccination annually
Poultry	Litter management		- Maintain light 12-14 hrs in brooder house. - The litter should be 7.5- 10 cm deep. - Saw dust, paddy husk or ground nut hulls can be used as litter. - Add lime with Saw dust, paddy husk or ground nut for maintain moisture.



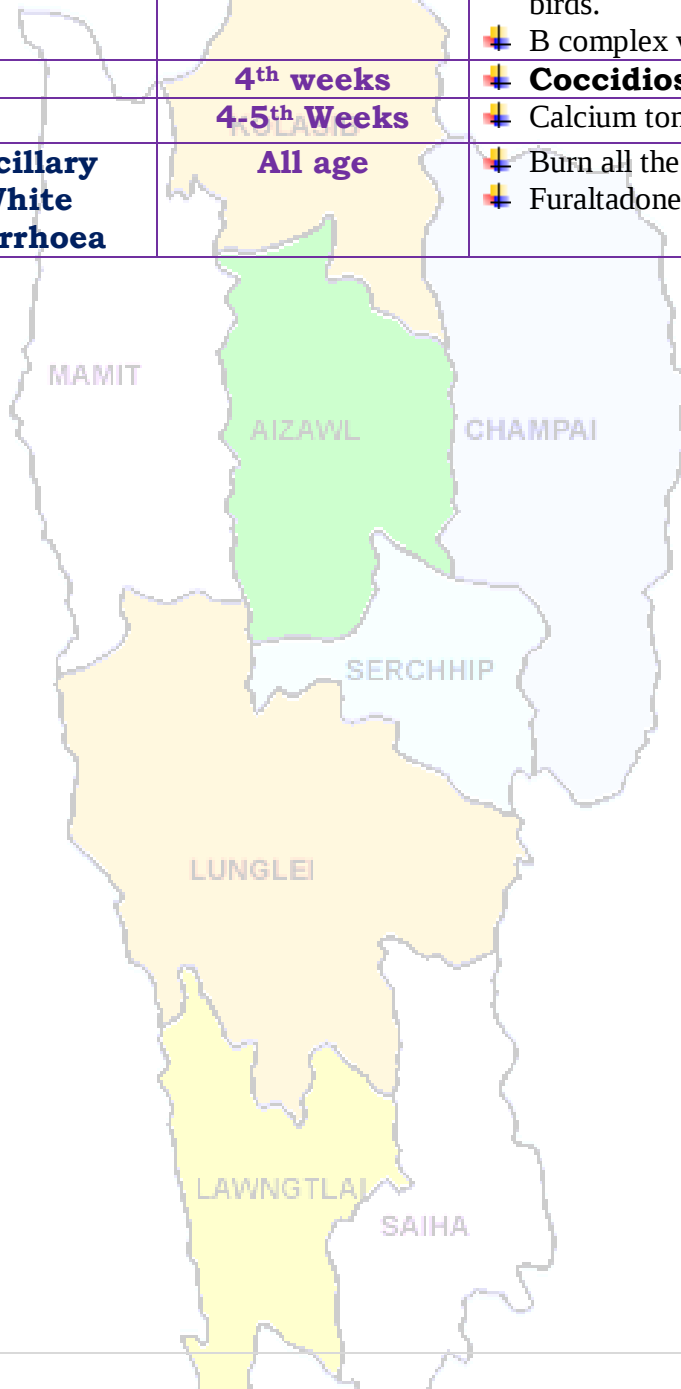
GRAMIN KRISHI MAUSAM SEWA ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



	Preventive measures	0-3rd week	✚ Ranikhet Disease- F1 vaccine at (1-6) days of birth and R₂B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ Coccidiosis- Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B ₁₂
	Bacillary White Diarrhoea	All age	✚ Burn all the dead birds. ✚ Furaldone@ 0.5 g/litre of water for 7 days.





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