GRAMIN KRISHI MAUSAM SEWA

ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Lawngtlai **Period:** 19 - 23, September, 2015

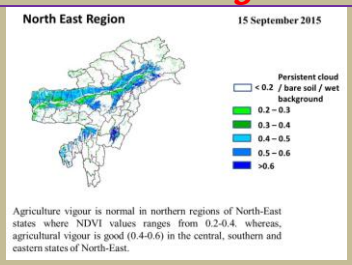
Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue:** 18th September, 2015

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	10	27	41	53	6
Max Temp (oC)	33	32	30	27	30
Min Temp (oC)	21	22	22	20	20
Cloud Coverage	Partially clear	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	96	97	98	98	97
Min RH (%)	54	56	72	89	61
Wind Speed (KmpH)	4	2	2	4	4
*Wind Direction	S-E	N-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- August 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 27-33^{0}C a ni ang a.A vawh lai ber in 20-22^{0}C ni tur ah beisei a ni.RH san lai berin 96-98% leh a hniam lai berin 54-89% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **137.0mm**
NDVI for Mizoram	 NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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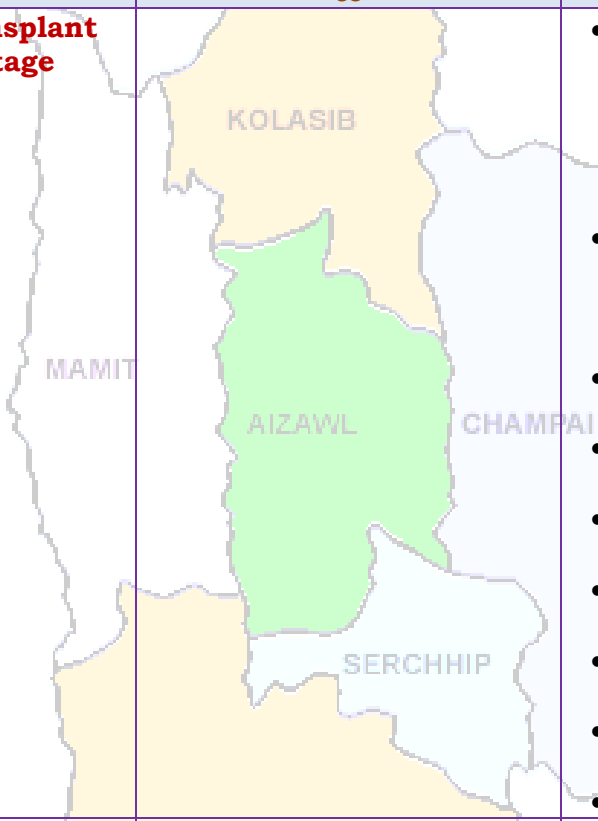
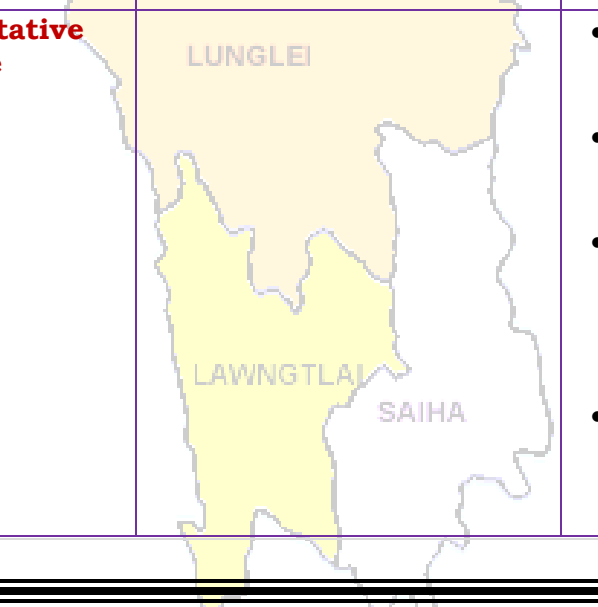
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		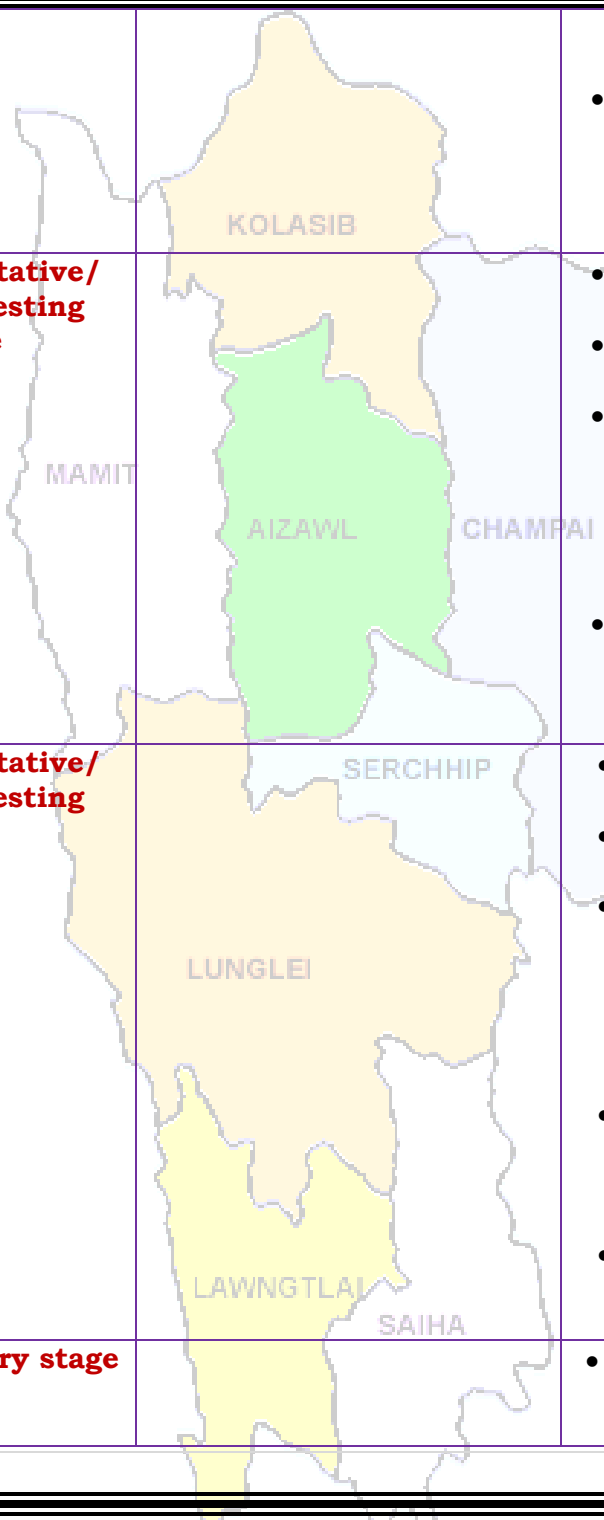	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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

District: Lunglei **Period:** 19 - 23, September, 2015

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Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	19	39	27	66	8
Max Temp (ºC)	35	34	32	31	30
Min Temp (ºC)	20	21	21	19	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	99	99	100	99	99
Min RH (%)	46	48	60	78	56
Wind Speed (KmpH)	4	2	2	2	2
*Wind Direction	S-E	E	E	S-E	E

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

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
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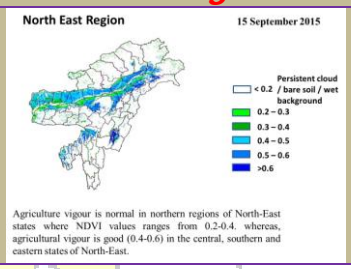
Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-35ºC and 19-21ºC. Maximum relative humidity is expected in the range of 99-100% and minimum may from 46-78%. Wind direction would be southeasterly to easterly with the wind speed of 2-4 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **159.0 mm**
NDVI for Mizoram	 NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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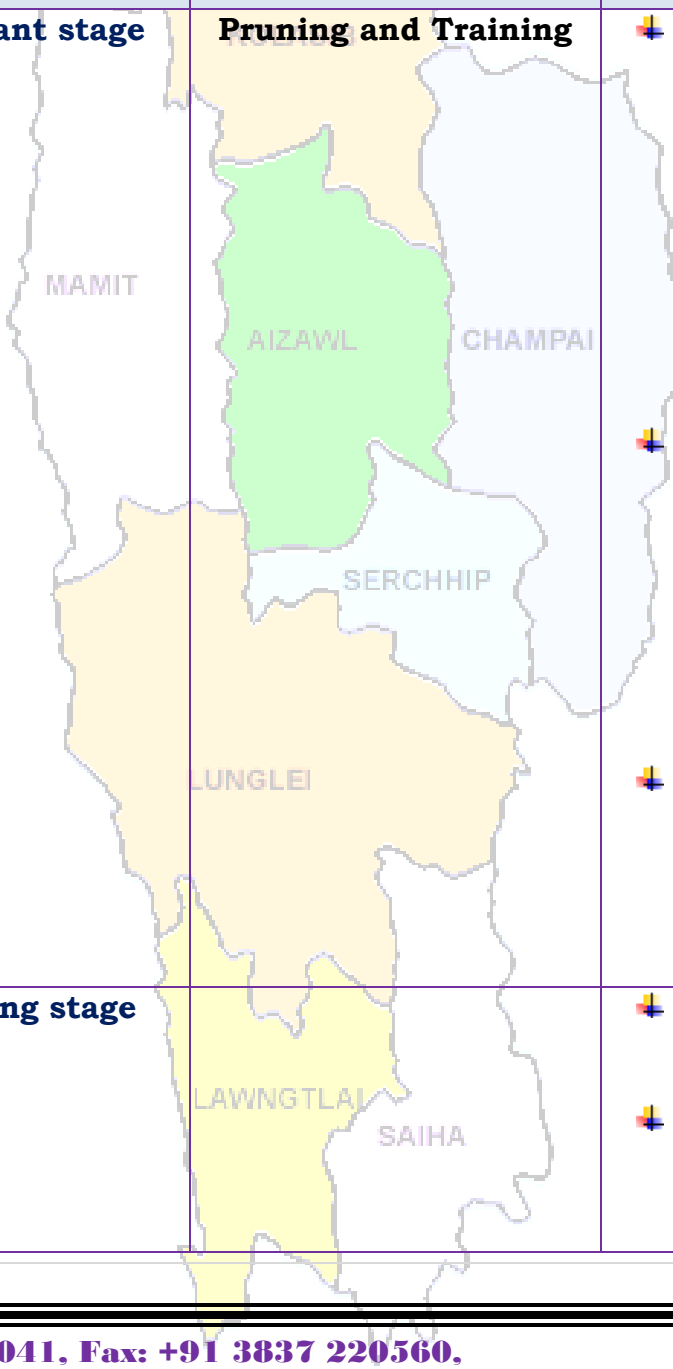
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		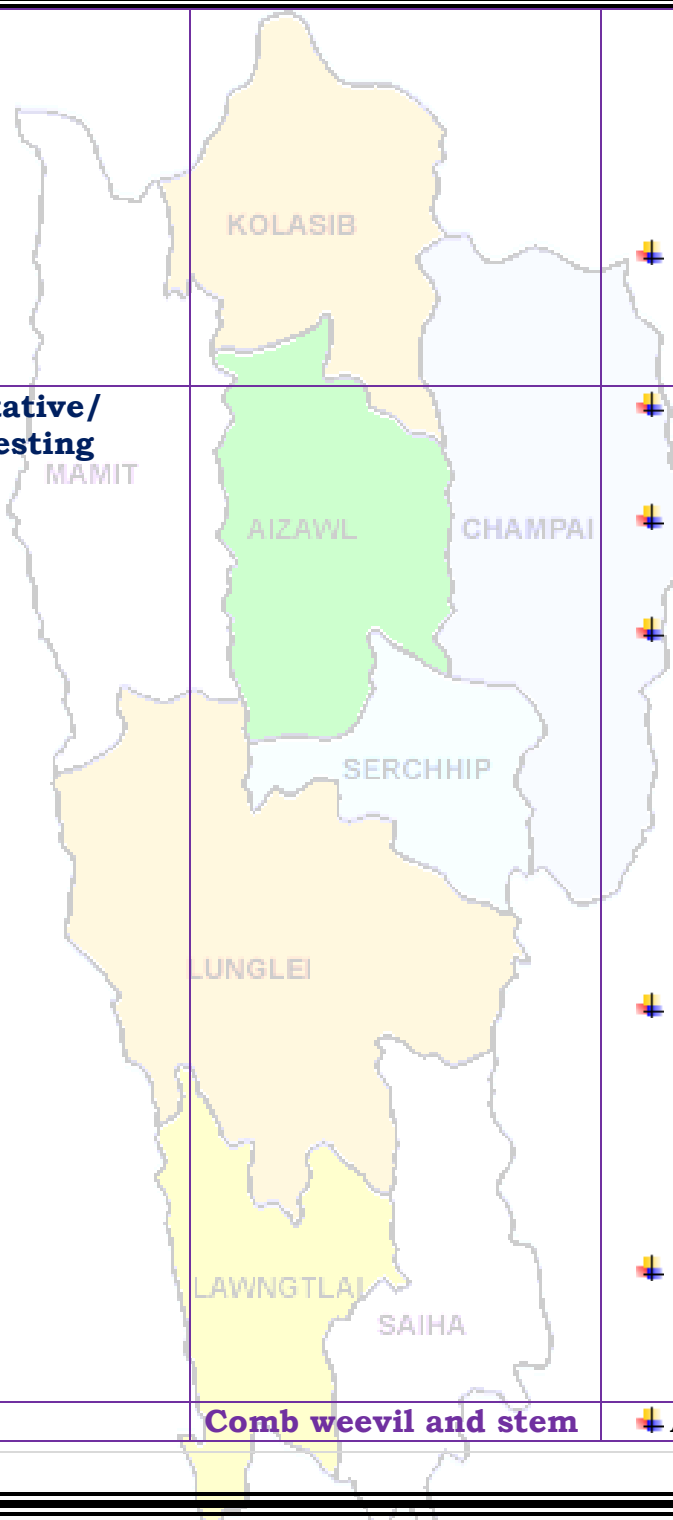	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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		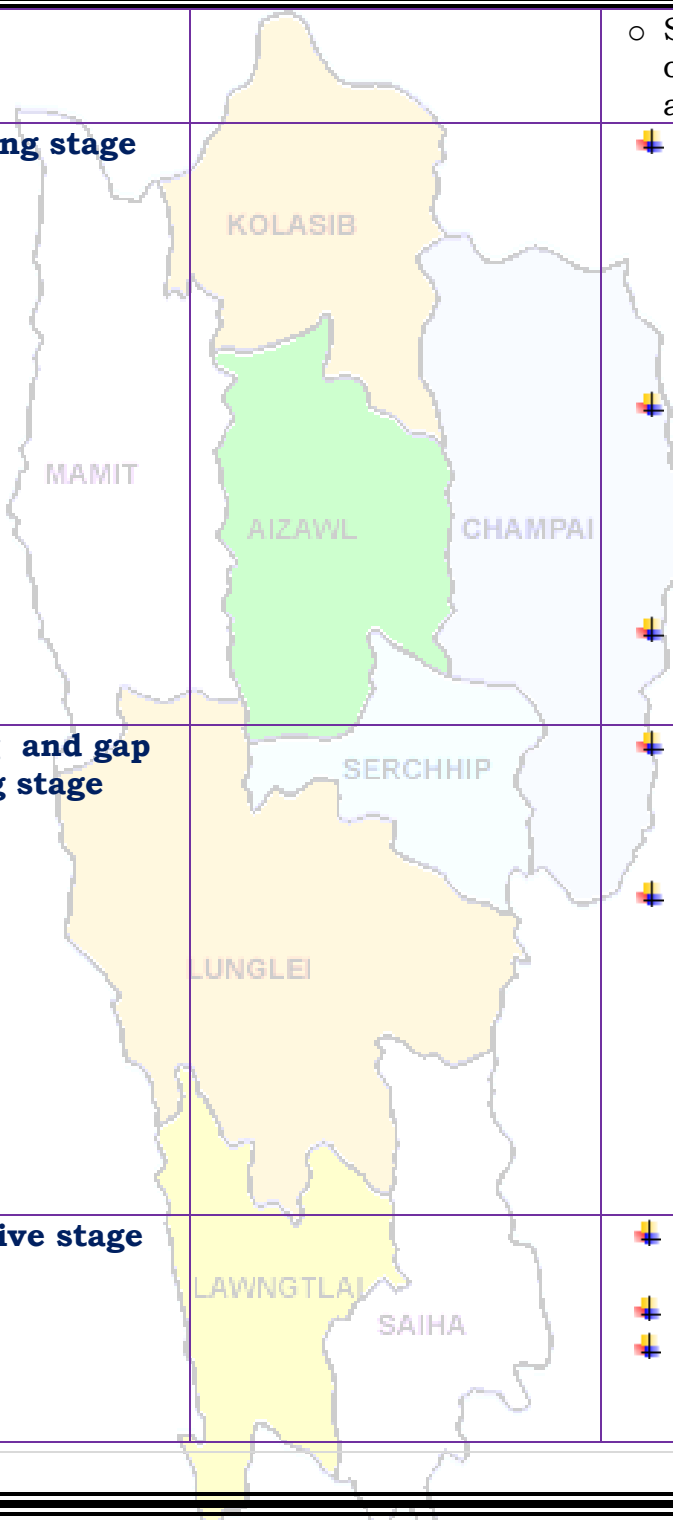	○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		➢ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ➢ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ➢ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		➢ Double row planting is done by alternating two rows of crops by a wider mound or path. ➢ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		➢ Trilling into bower structure. ➢ Weeding near the plant ➢ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Lunglei **Period: 19 - 23, September, 2015**

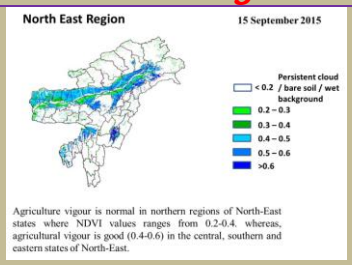
Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue: 18th September, 2015**

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	19	39	27	66	8
Max Temp (oC)	35	34	32	31	30
Min Temp (oC)	20	21	21	19	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	99	99	100	99	99
Min RH (%)	46	48	60	78	56
Wind Speed (KmpH)	4	2	2	2	2
*Wind Direction	S-E	E	E	S-E	E

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

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 30-35^{0}C a ni ang a.A vawh lai ber in 19-21^{0}C ni tur ah beisei a ni.RH san lai berin 99-100% leh a hniam lai berin 46-78% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2-4 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **159.0mm**
NDVI for Mizoram	 NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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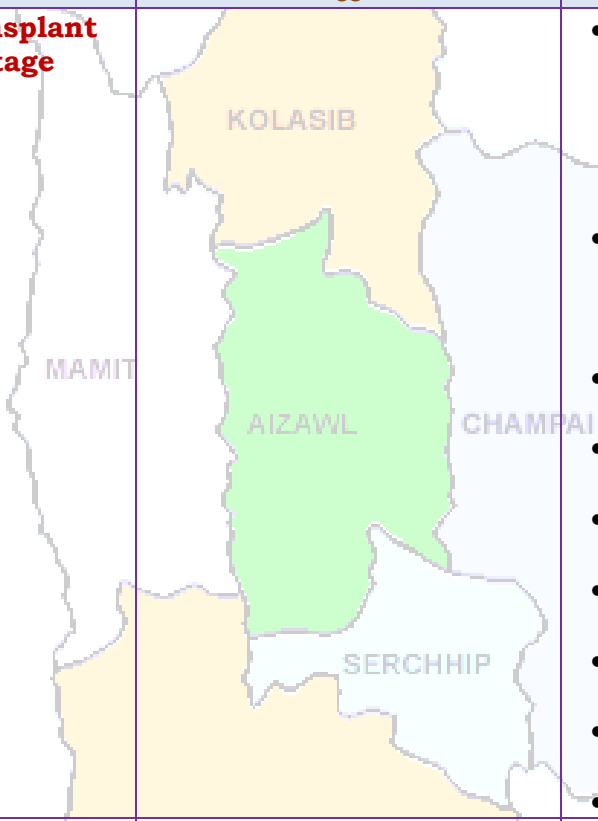
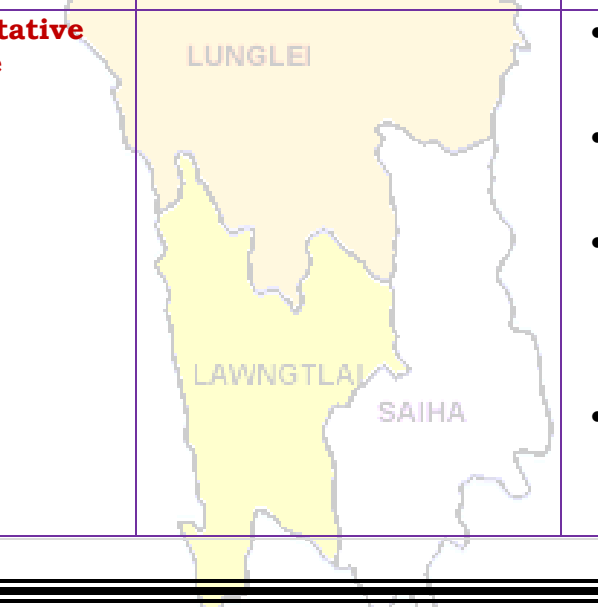
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		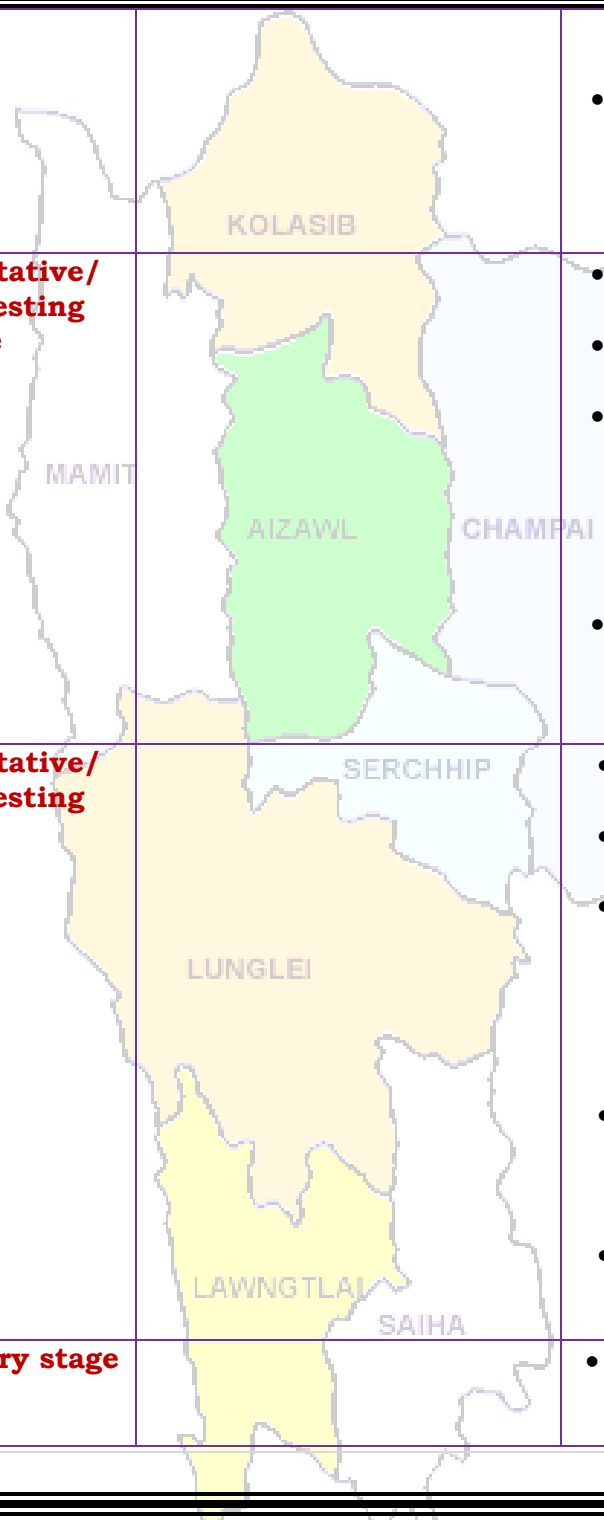	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Mamit **Period:** 19 - 23, September, 2015

Bulletin No: -554/2015/ Bulletin/English **Date of issue:** 18th September, 2015

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	6	22	17	55	7
Max Temp (ºC)	35	35	33	32	29
Min Temp (ºC)	22	23	23	21	21
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	97	99	99	99	100
Min RH (%)	53	48	64	64	73
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	S-E	S-E	E	S

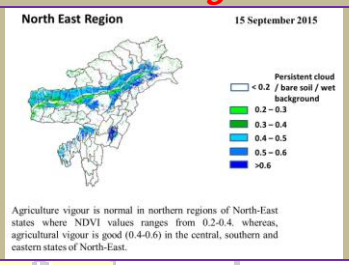
Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

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

Aizawl- 313.32mm (387.0mm) Champhai- 268.78mm (301.30mm) Saiha- 216.20 mm (367.7mm) Kolasib- 247.17mm (372.0mm)

Lawngtlai-226.10mm (365.4mm) Lunglei-370.28mm (371.4mm) Mamit-197.57mm (376.0mm) Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 29-35ºC and 21-23ºC. Maximum relative humidity is expected in the range of 97-100% and minimum may from 48-73%. Wind direction would be southeasterly to easterly and southerly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **107.0 mm**

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

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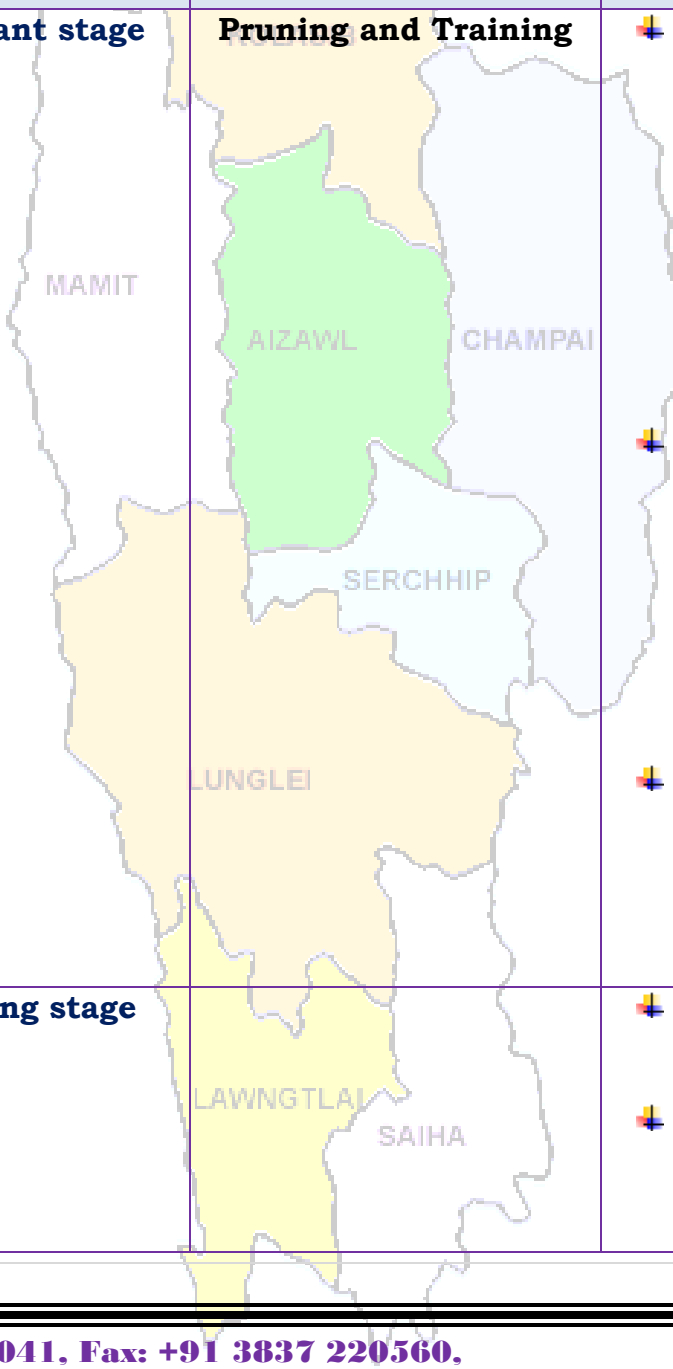
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		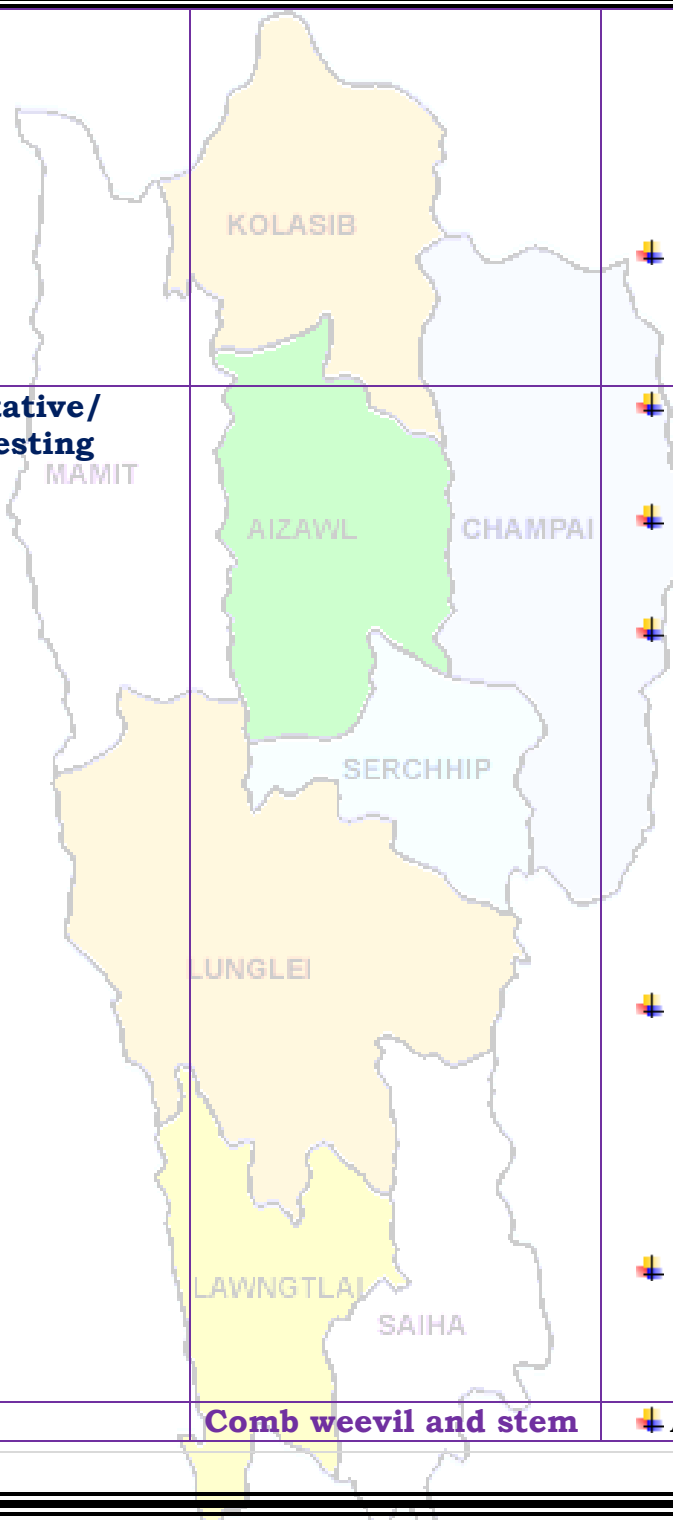	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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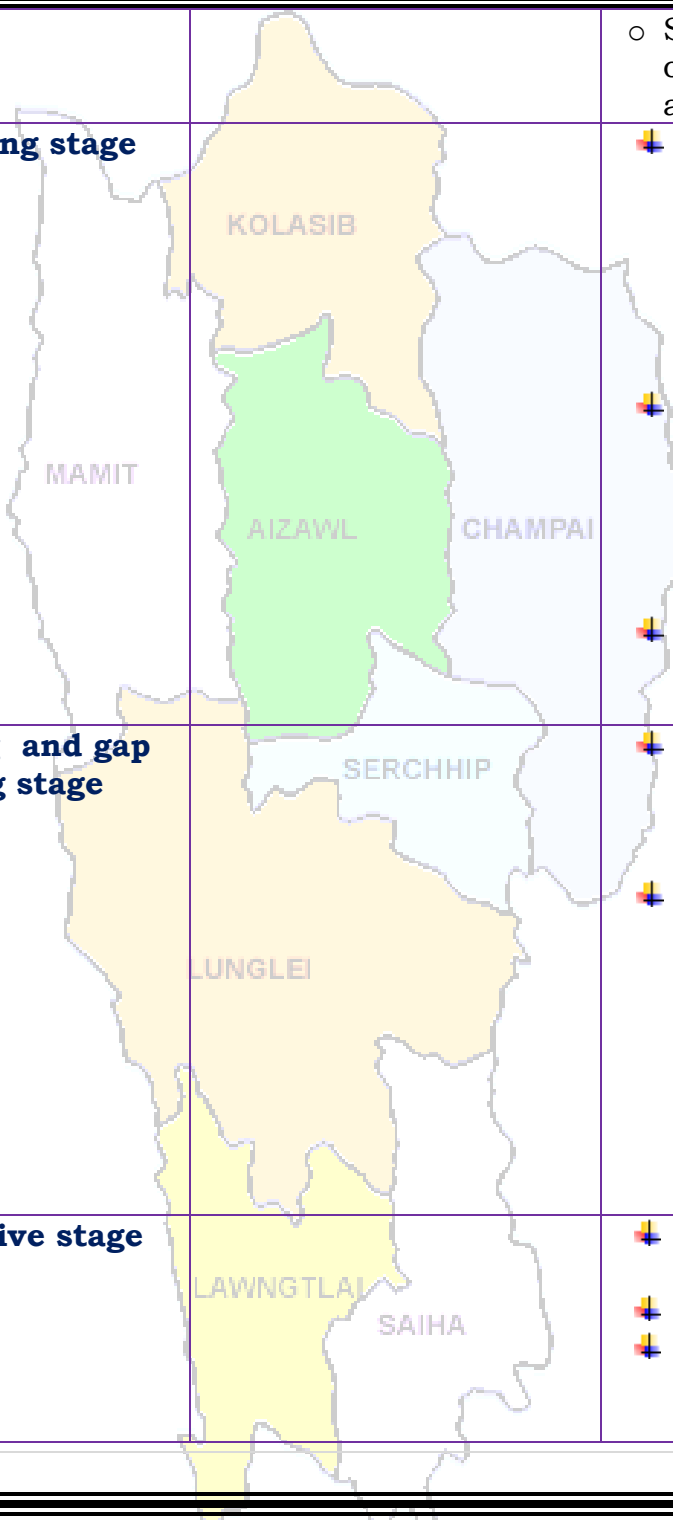
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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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:** 19 - 23, September, 2015

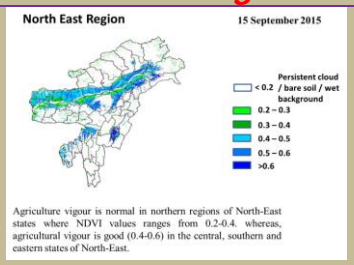
Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue:** 18th September, 2015

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	6	22	17	55	7
Max Temp (oC)	35	35	33	32	29
Min Temp (oC)	22	23	23	21	21
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	97	99	99	99	100
Min RH (%)	53	48	64	64	73
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	S-E	S-E	E	S

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan	
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 29-35^{0}C a ni ang a.A vawh lai ber in 21-23^{0}C ni tur ah beisei a ni.RH san lai berin 97-100% leh a hniam lai berin 48-73% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **107.0mm**	
NDVI for Mizoram		NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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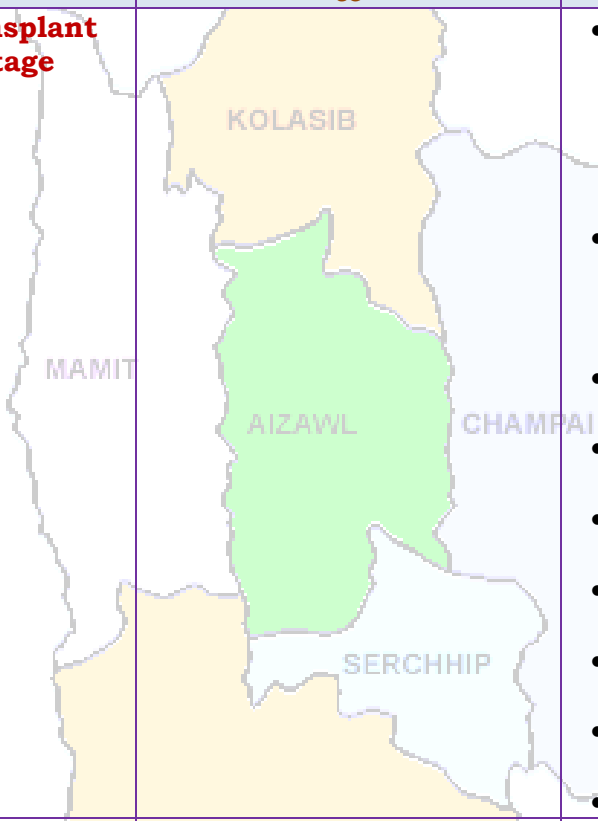
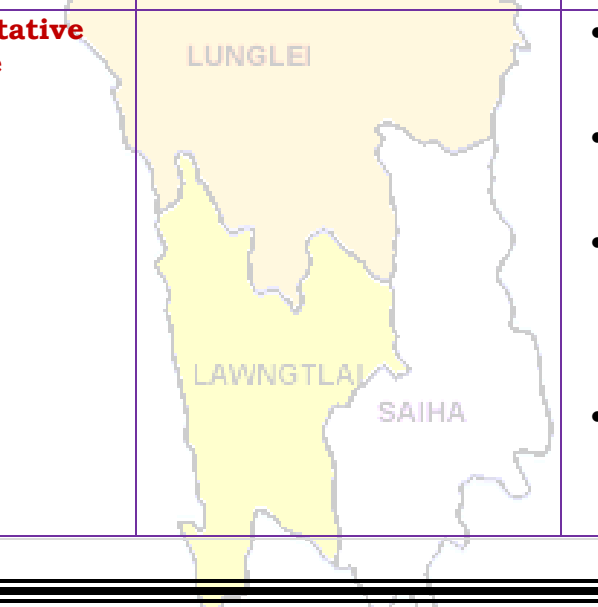
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		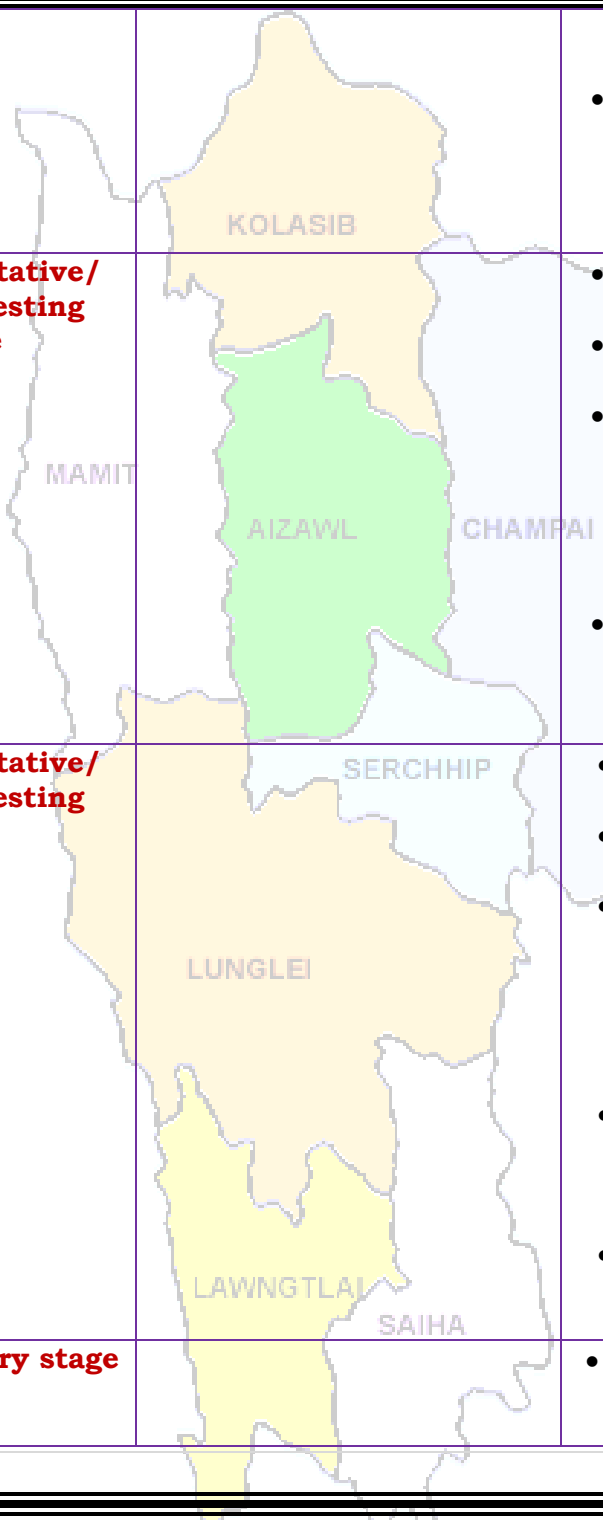	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Saiha **Period:** 19 - 23, September, 2015

Bulletin No: -554/2015/ Bulletin/English **Date of issue:** 18th September, 2015

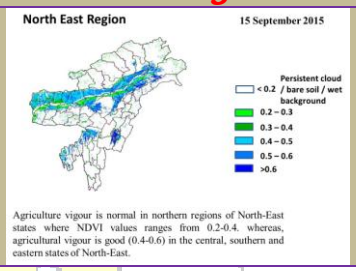
Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	13	30	45	58	4
Max Temp (ºC)	33	33	30	27	30
Min Temp (ºC)	20	20	21	19	19
Cloud Coverage	Partially clear	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	98	99	99	99
Min RH (%)	52	52	69	91	59
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	E	N-E	E	E

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

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-33ºC and 19-21ºC. Maximum relative humidity is expected in the range of 98-99% and minimum may from 52-69%. Wind direction would be easterly to northeasterly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **150.0 mm**

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

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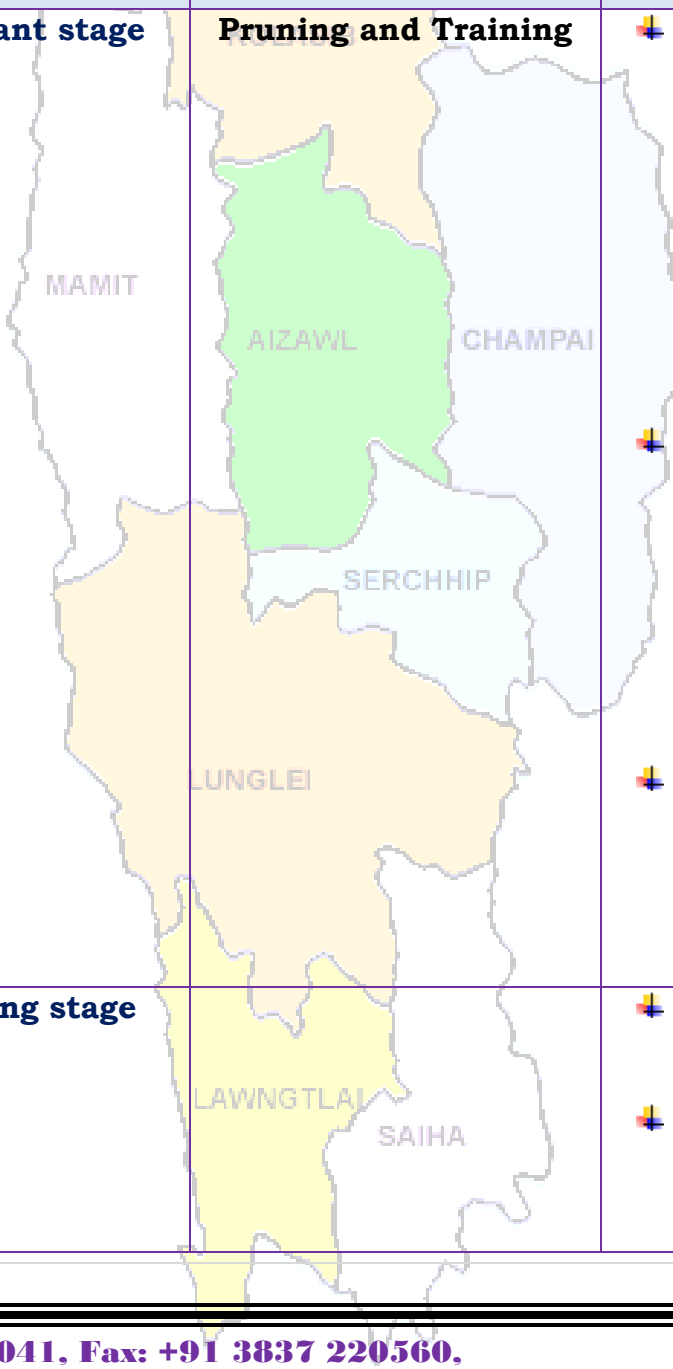
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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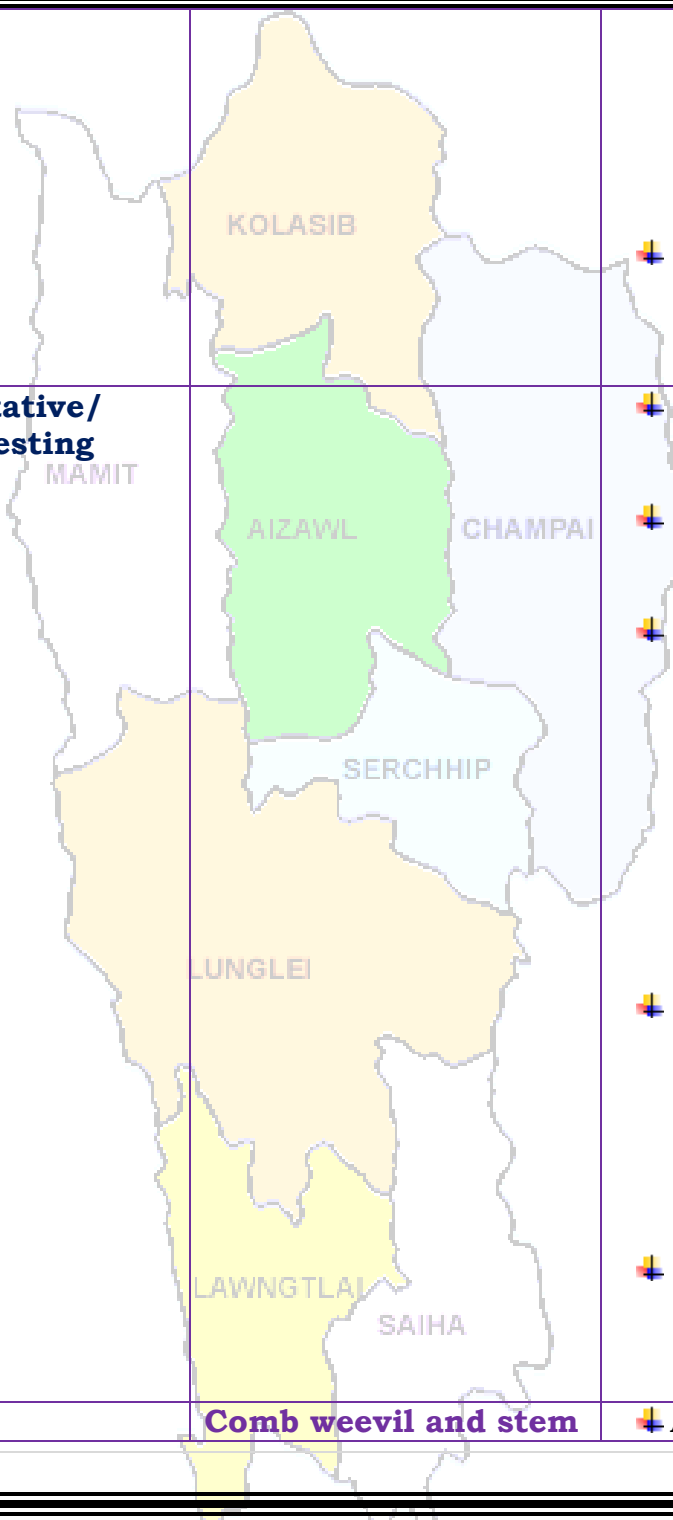
			in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. - Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		- Cleaning near base of the plant and cut unwanted branches. - Application of split dose of fertilizer 600: 200:100 (g/pt). - Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. - Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. - Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	- Applications of neem



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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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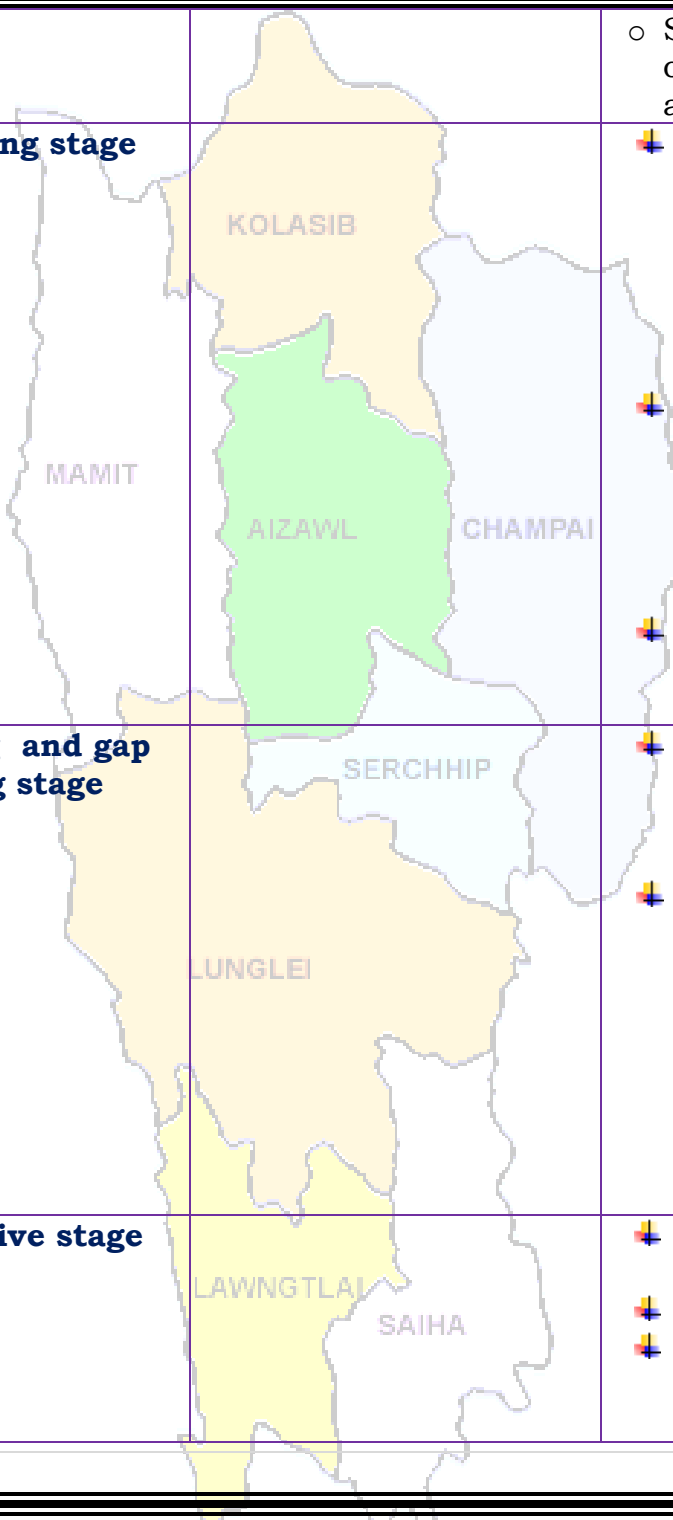
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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

District: Saiha **Period:** 19 - 23, September, 2015

Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue:** 18th September, 2015

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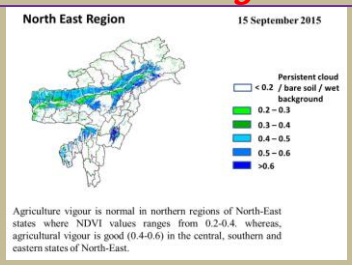
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	E	N-E	E	E

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

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 27-33^{0}C a ni ang a.A vawh lai ber in 19-21^{0}C ni tur ah beisei a ni.RH san lai berin 98-99% leh a hniam lai berin 52-69% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **150.0mm**
NDVI for Mizoram	

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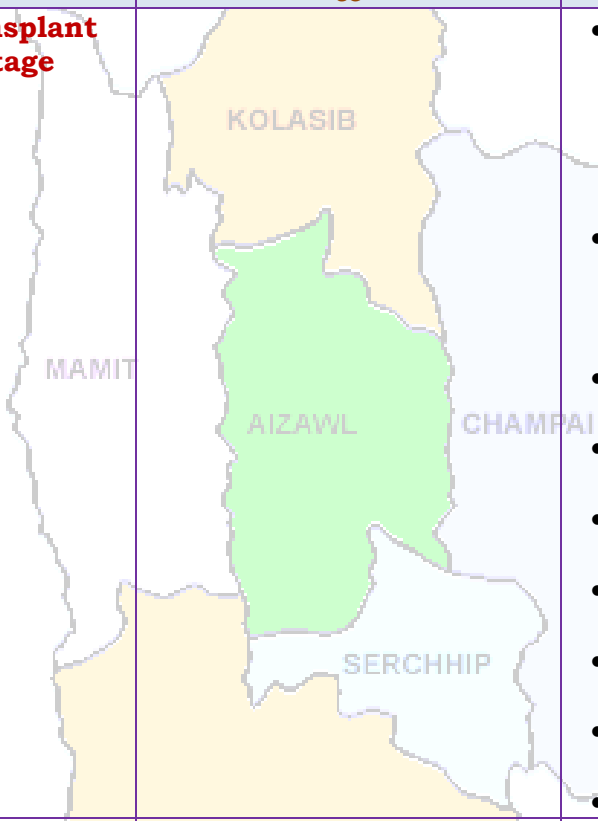
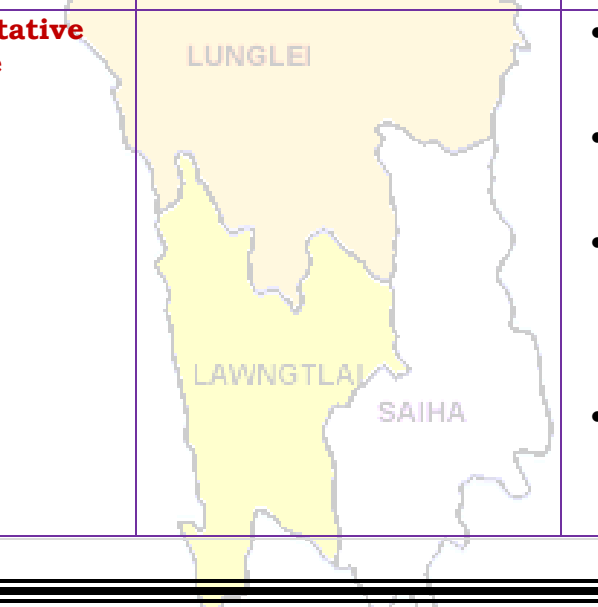
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		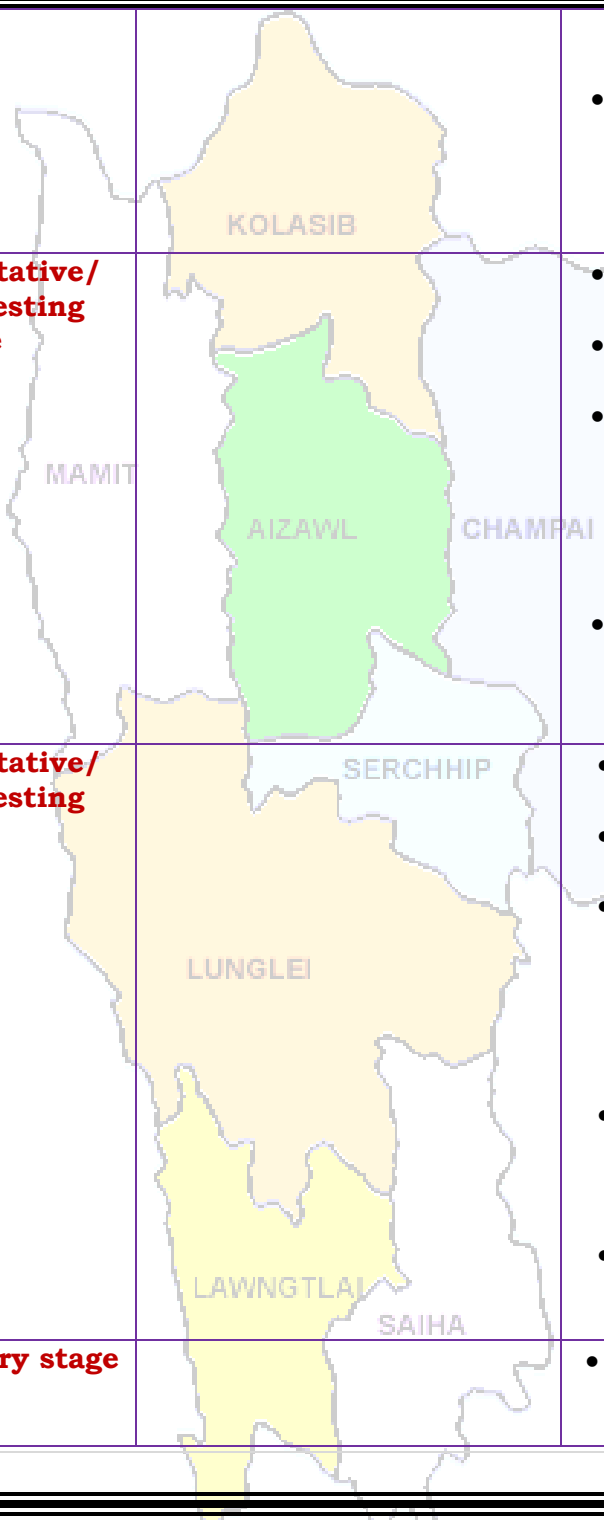	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Serchhip **Period:** 19 - 23, September, 2015

Bulletin No: -554/2015/ Bulletin/English **Date of issue:** 18th September, 2015

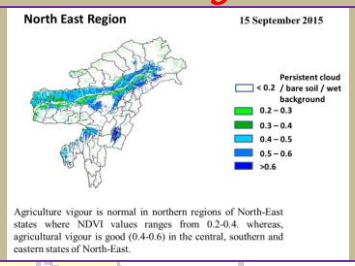
Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	26	44	26	77	7
Max Temp (ºC)	35	35	34	32	30
Min Temp (ºC)	19	20	20	18	18
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	100	100	100	100	100
Min RH (%)	43	42	46	74	56
Wind Speed (KmpH)	3	2	2	0	0
*Wind Direction	E	E	E	E	E

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

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-35ºC and 18-20ºC. Maximum relative humidity is expected in the range of 100% and minimum may from 42-74%. Wind direction would be easterly with the wind speed of 0-3 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **180.0 mm**

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

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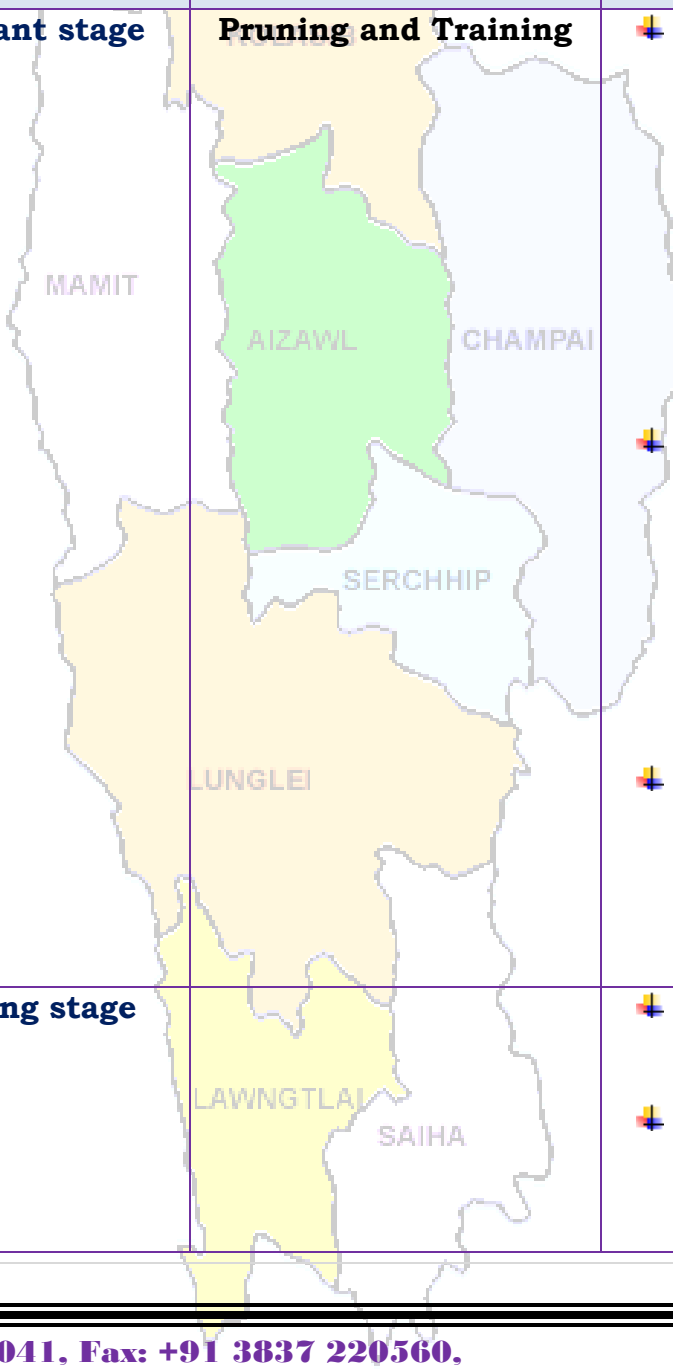
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		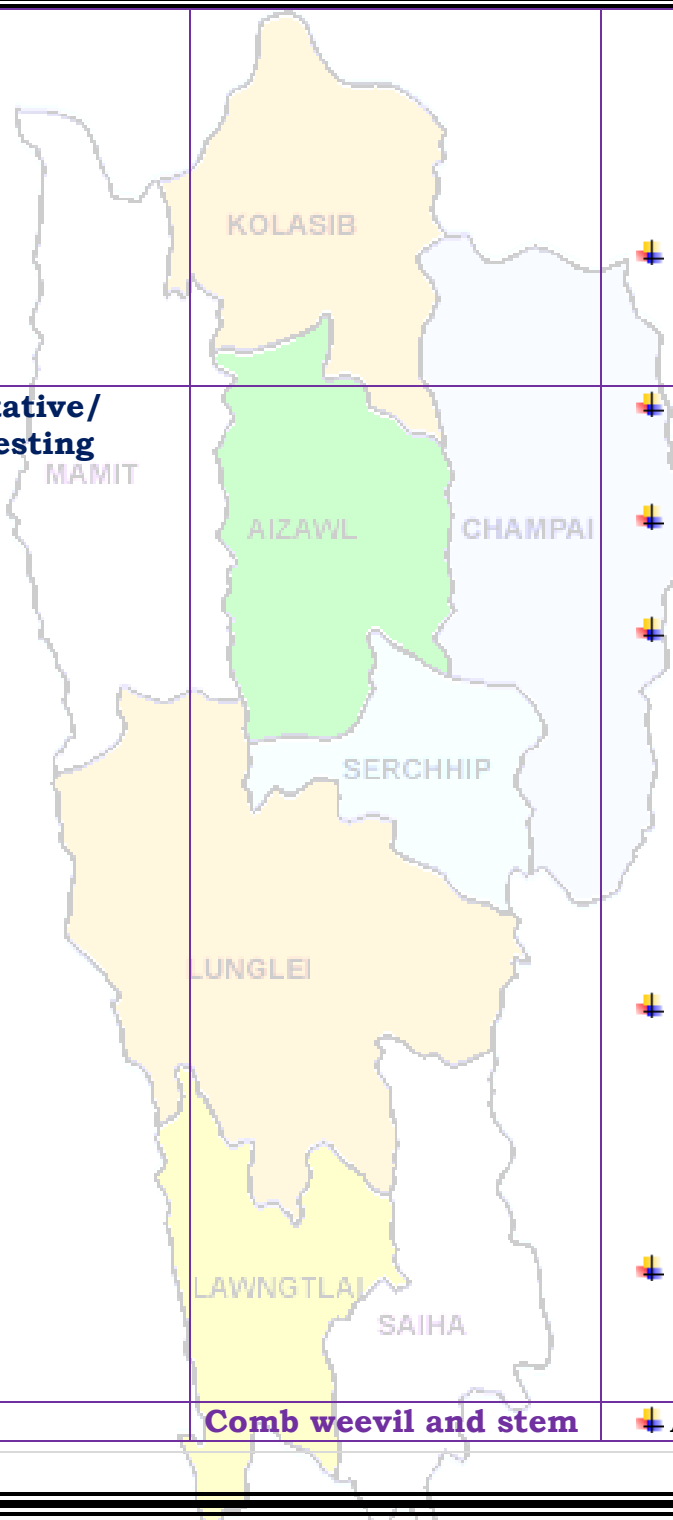	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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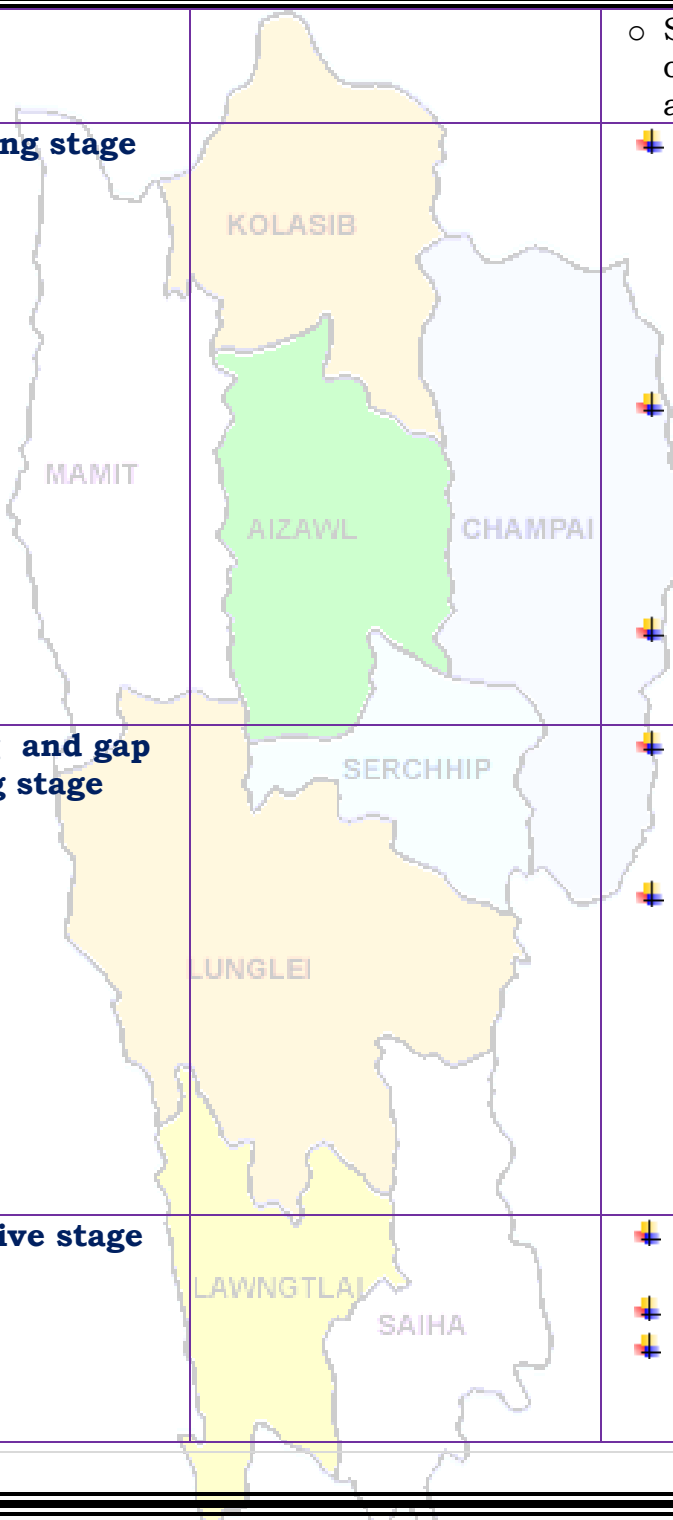
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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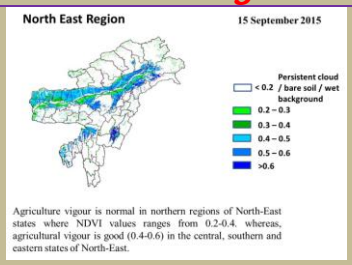
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 30-35^{0}C a ni ang a.A vawh lai ber in 18-20^{0}C ni tur ah beisei a ni.RH san lai berin 100% leh a hniam lai berin 42-74% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 0-3 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **180.0mm**
NDVI for Mizoram	 NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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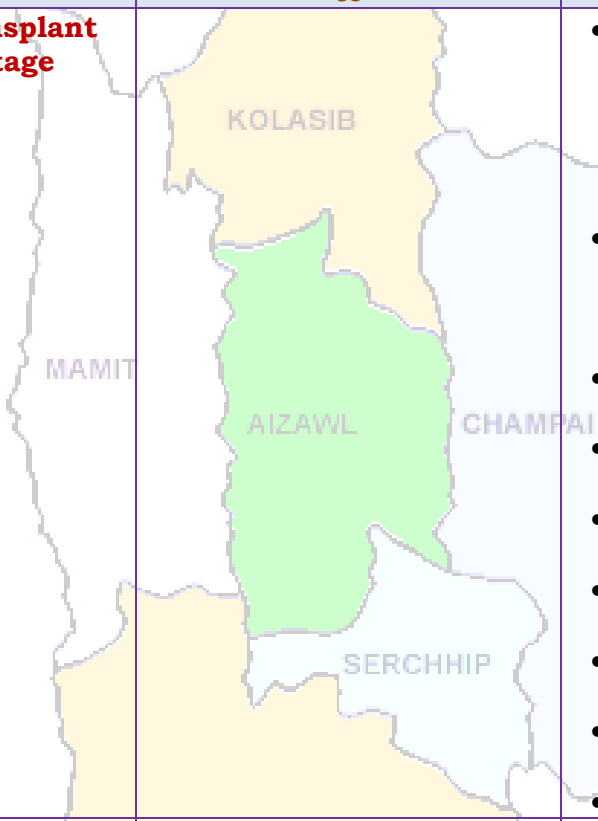
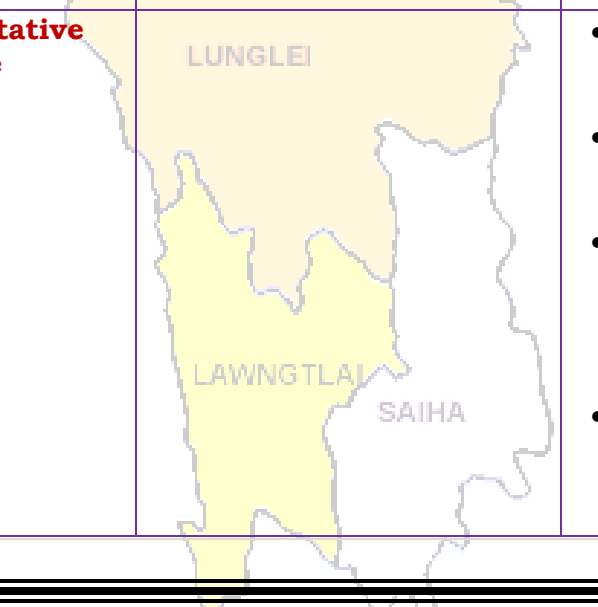
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		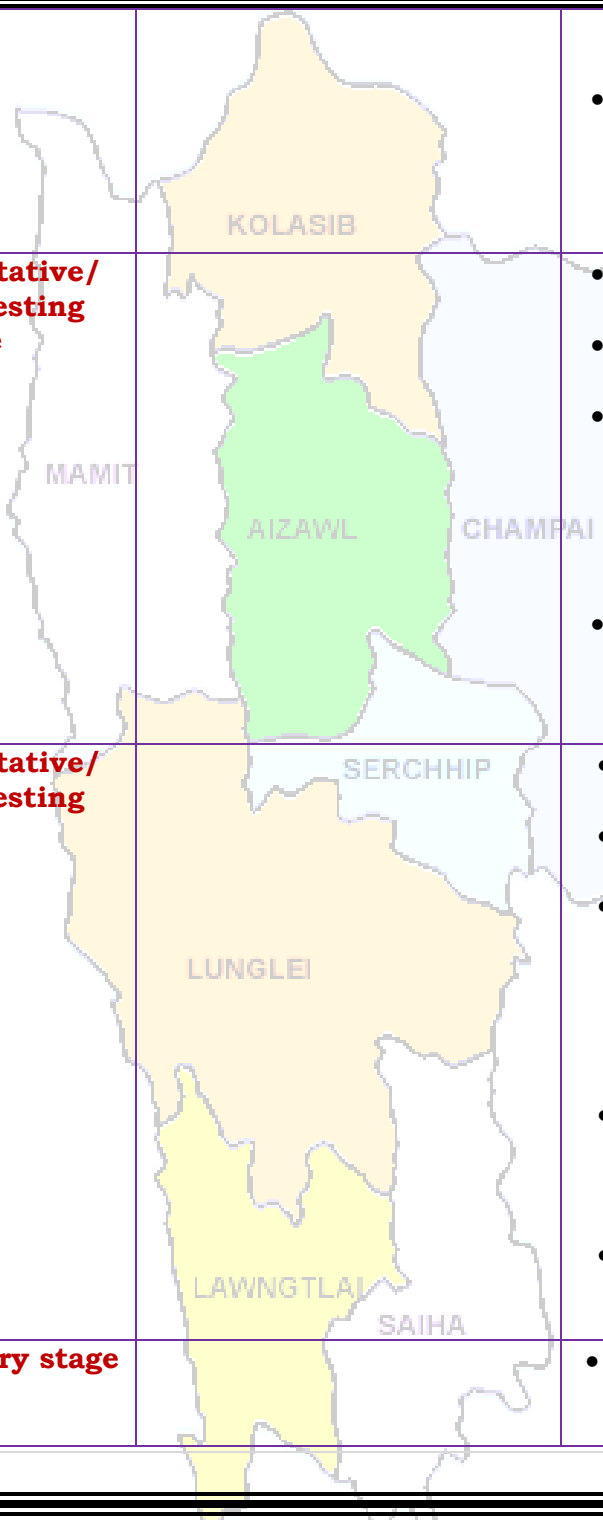	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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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: Aizawl **Period: 19 - 23, September, 2015**

Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue: 18th September, 2015**

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	13	32	19	55	7
Max Temp (oC)	34	35	33	32	29
Min Temp (oC)	20	21	21	19	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	99	99	99	100	100
Min RH (%)	52	45	55	62	75
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	S-E	E	E	S

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

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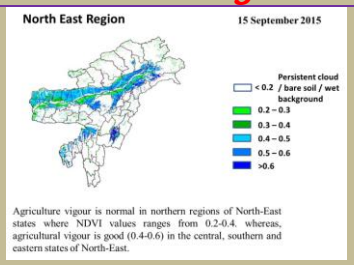
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 29-35^{0}C a ni ang a.A vawh lai ber in 19-21^{0}C ni tur ah beisei a ni.RH san lai berin 99-100% leh a hniam lai berin 45-75% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 2 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **126.0mm**	
NDVI for Mizoram		NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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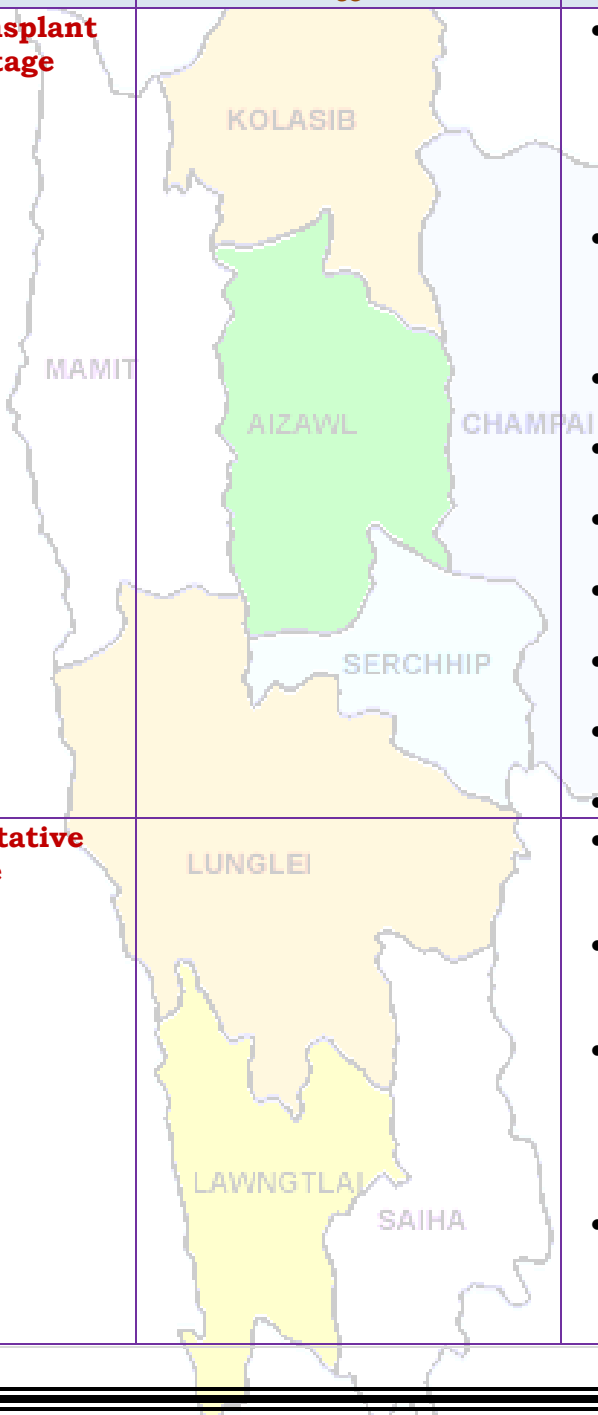
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		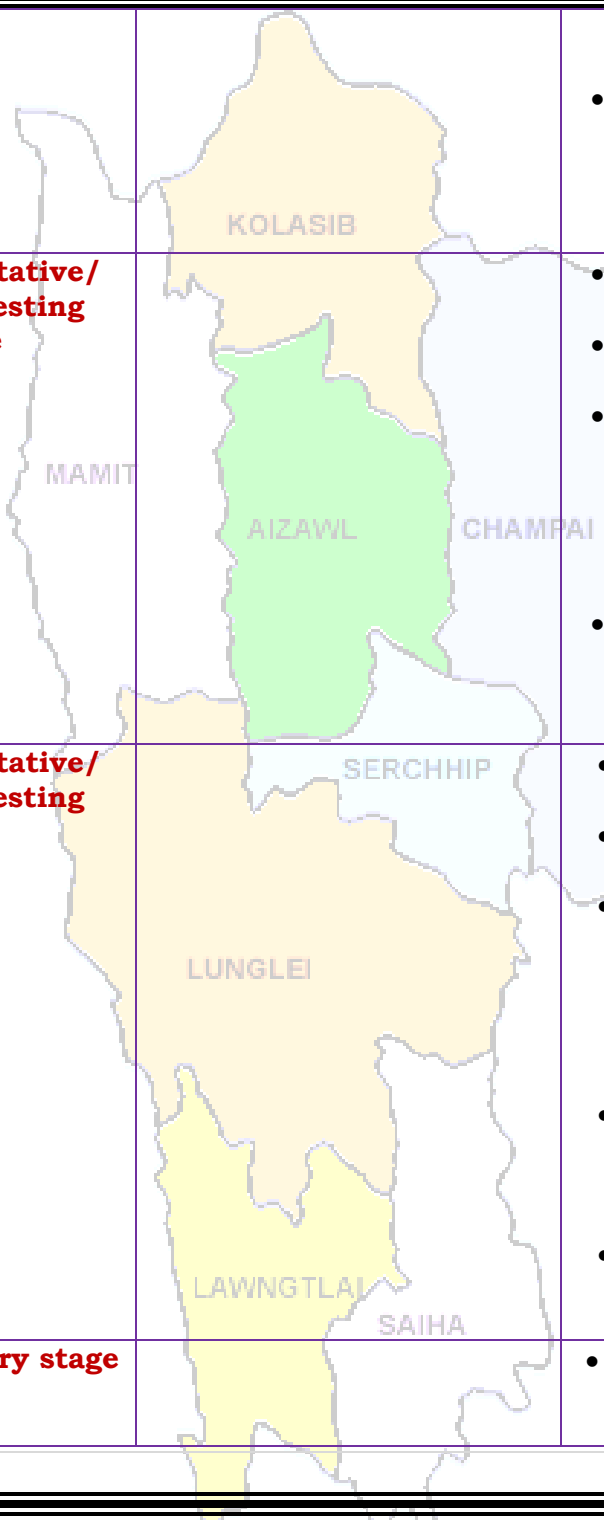	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
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Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
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		1. Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur
		2. Flea beetle	• Pangang tui leh a puitling te chu a kung atangin thin thlak tur. • Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		3. Epilachna beetle	• A hnah a pangang leh a tui awm chu paihfai tur. • Methyl parathion 0.5% emaw Dimethoate 0.3% a kah tur.
		4. Leaf hopper	• Heng insecticides Imidacloprid 200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Bacterial wilt	• Huan chu fai taka dah a, thlai damlo te chu paihfai bawk tur. • Thlai damlo enkawl nan copper fungicide (2% Bordeaux mixture) a kah tur.bacterial witl chu root knot nematodes tam naah a awm thin a, hemi nematodes control hian bacterial wilt hi a veng thei. • Streptocycline sulphate chu tui litre khatah 0.3g leh Blitox 50 chu tui litre 15 ah 5g a pek tur.
		Damping off	• Thlai chi chu kg khatah Thiram 3g emaw Trichoderma viride4g+Metalaxyl 4g (Apron) a chiah tur. • Bordeaux mixture 1% emaw 2g Captan emaw 3 copper oxychloride chu tui litre khatah pawlhin a chin atanga ni 10-15 ah leih tur.
		Leaf spot and leaf blotch	• Dithane M-45 chu tui litre khatah

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Aizawl **Period: 19 - 23, September, 2015**

Bulletin No: -554/2015/ Bulletin/English **Date of issue: 18th September, 2015**

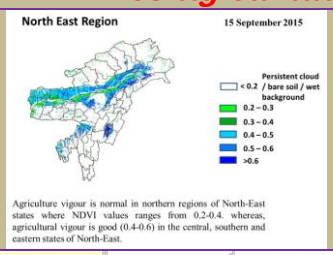
Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	13	32	19	55	7
Max Temp (ºC)	34	35	33	32	29
Min Temp (ºC)	20	21	21	19	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	99	99	99	100	100
Min RH (%)	52	45	55	62	75
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	S-E	E	E	S

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 29-35ºC and 19-21ºC. Maximum relative humidity is expected in the range of 99-100% and minimum may from 45-75%. Wind direction would be southeasterly to easterly and southerly with the wind speed of 2 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **126.0 mm**

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

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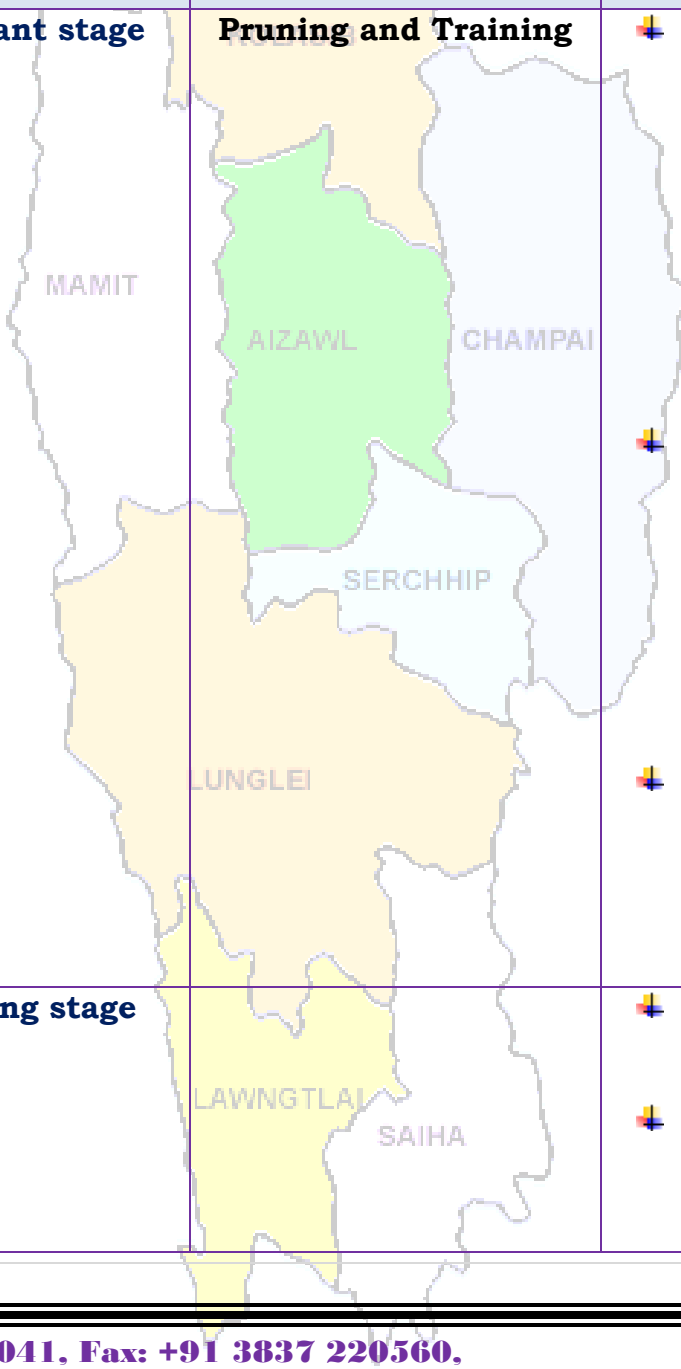
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		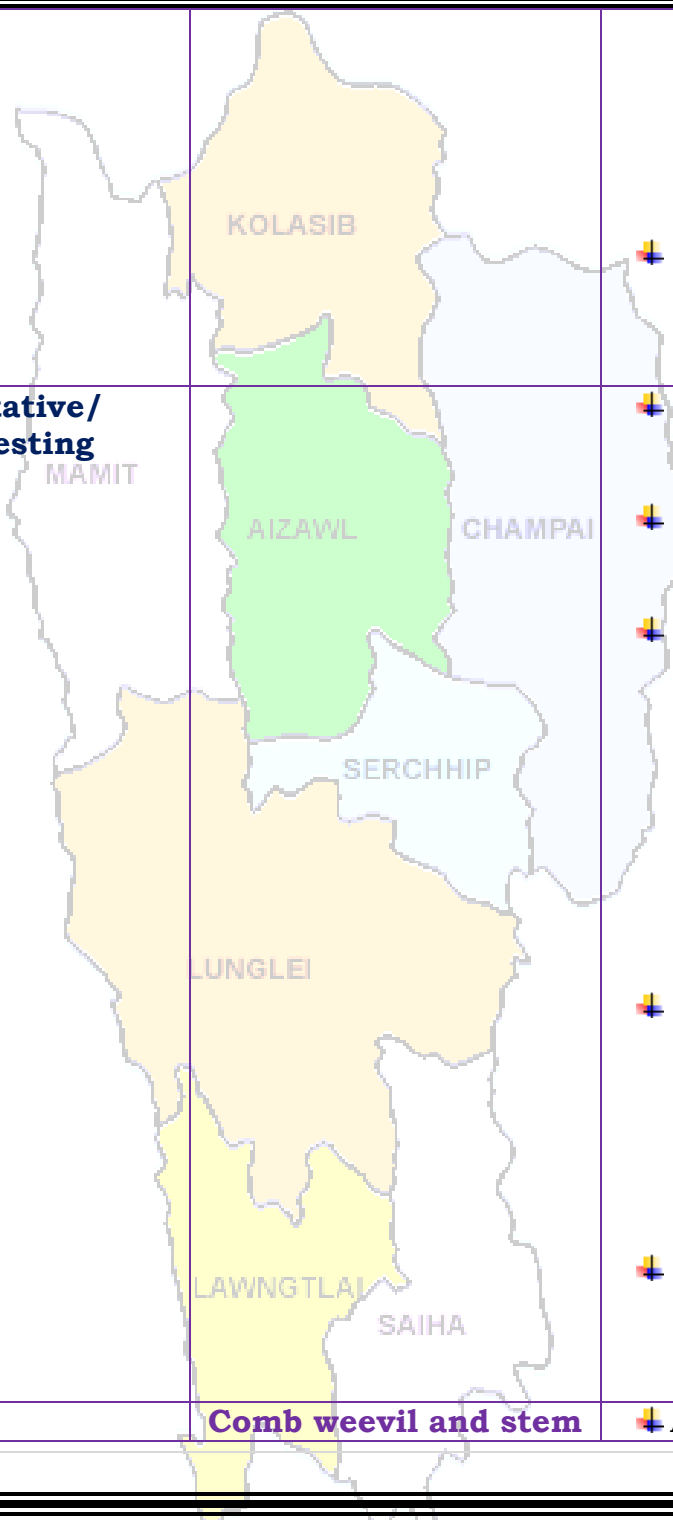	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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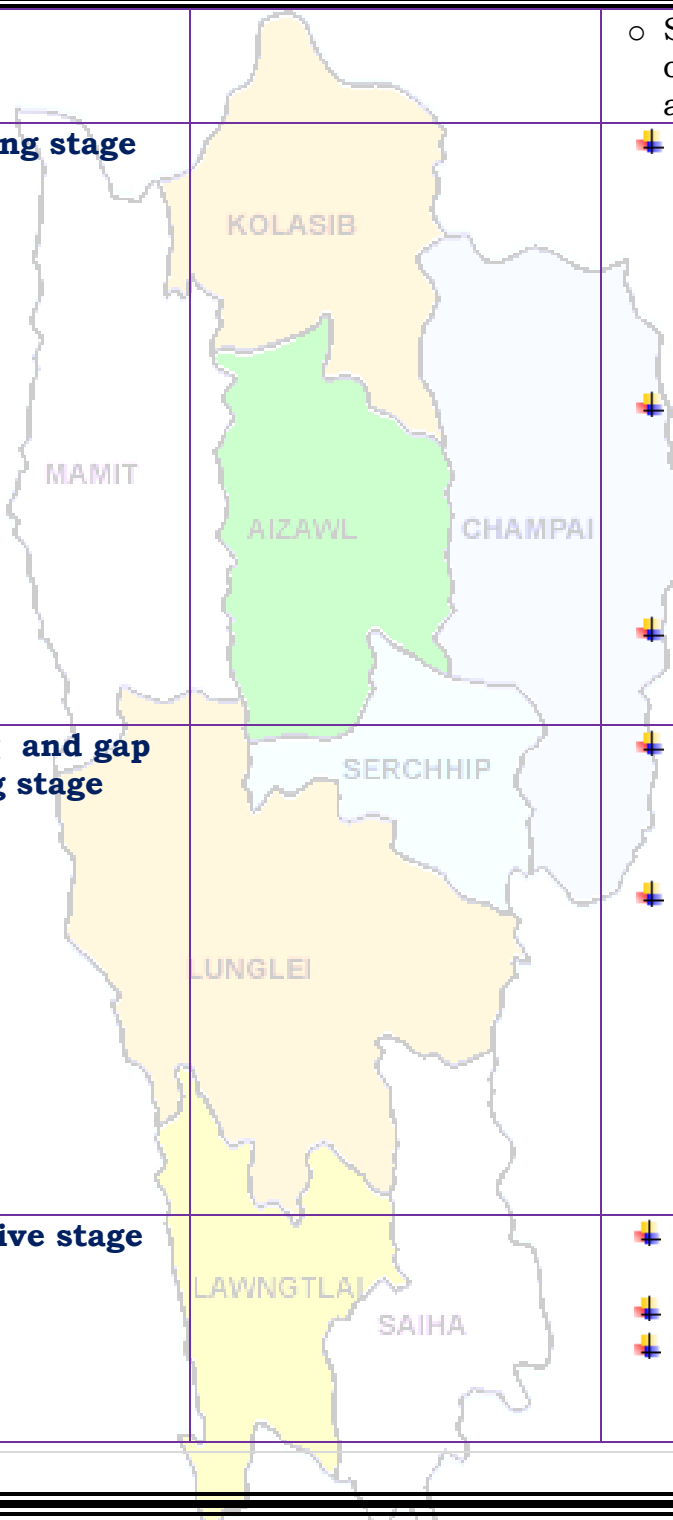
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed. ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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

District: Champhai **Period: 19 - 23, September, 2015**

Bulletin No: -554/2015/ Bulletin/English **Date of issue: 18th September, 2015**

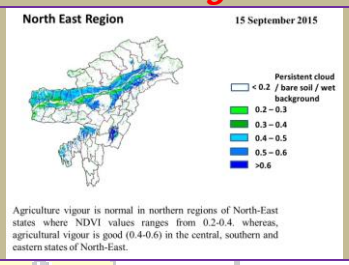
Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	21	36	25	67	7
Max Temp (ºC)	32	34	32	29	27
Min Temp (ºC)	19	20	20	18	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	98	98	99	99
Min RH (%)	49	45	53	71	74
Wind Speed (KmpH)	2	2	2	0	2
***Wind Direction**	S-E	S-E	S-E	E	S

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-34ºC and 18-20ºC. Maximum relative humidity is expected in the range of 98-99% and minimum may from 45-74%. Wind direction would be southeasterly to easterly and southerly with the wind speed of 0-2 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **156.0 mm**

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

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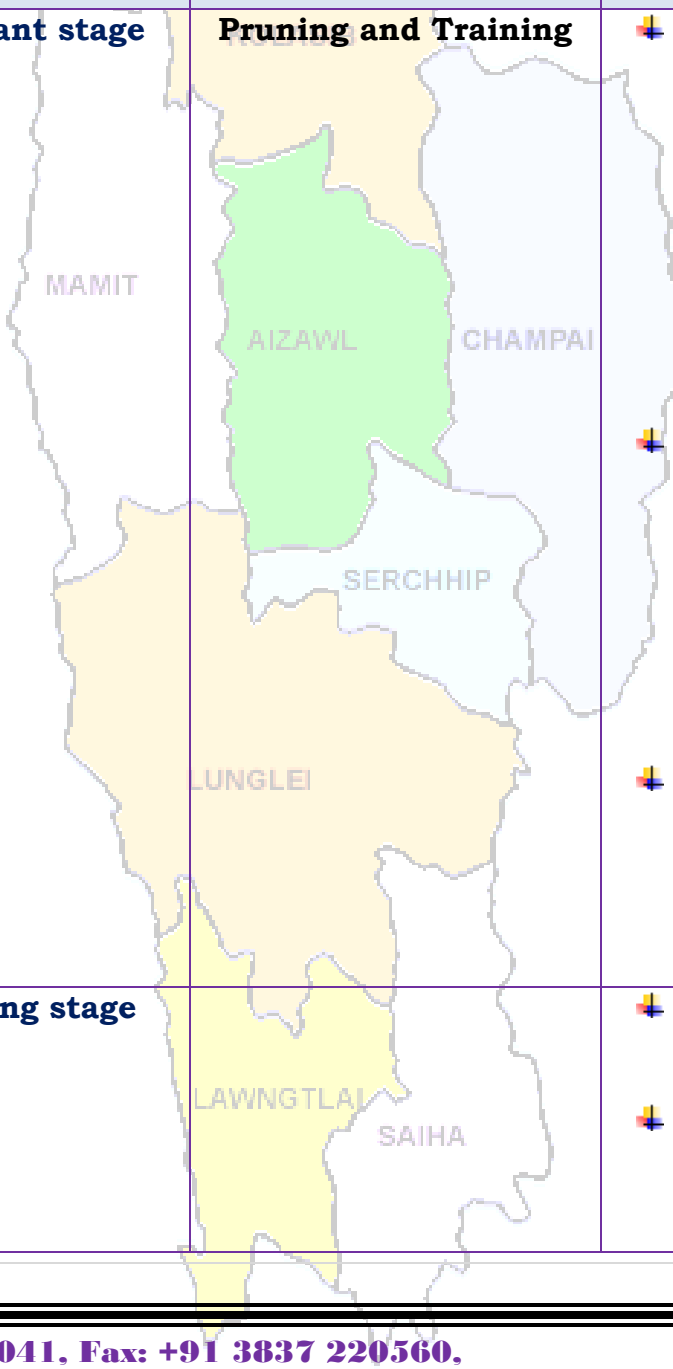
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		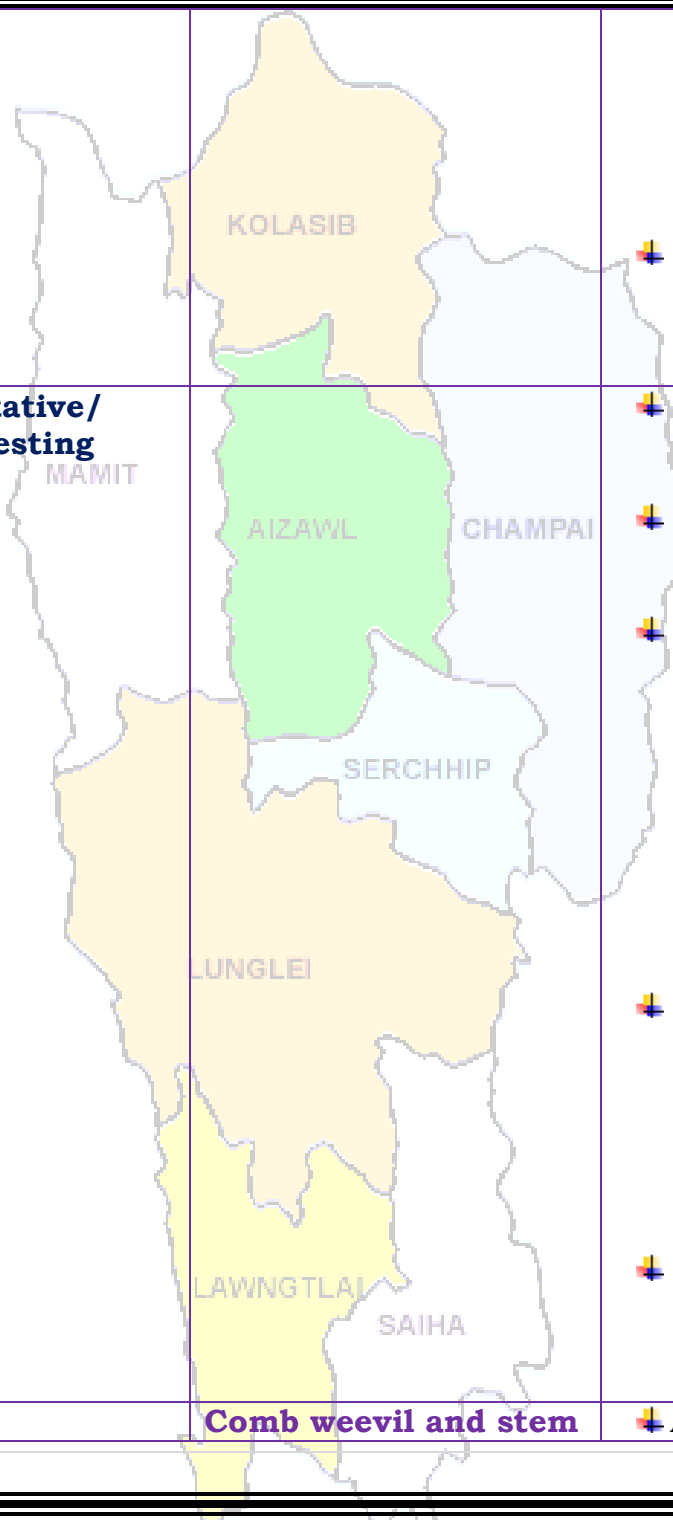	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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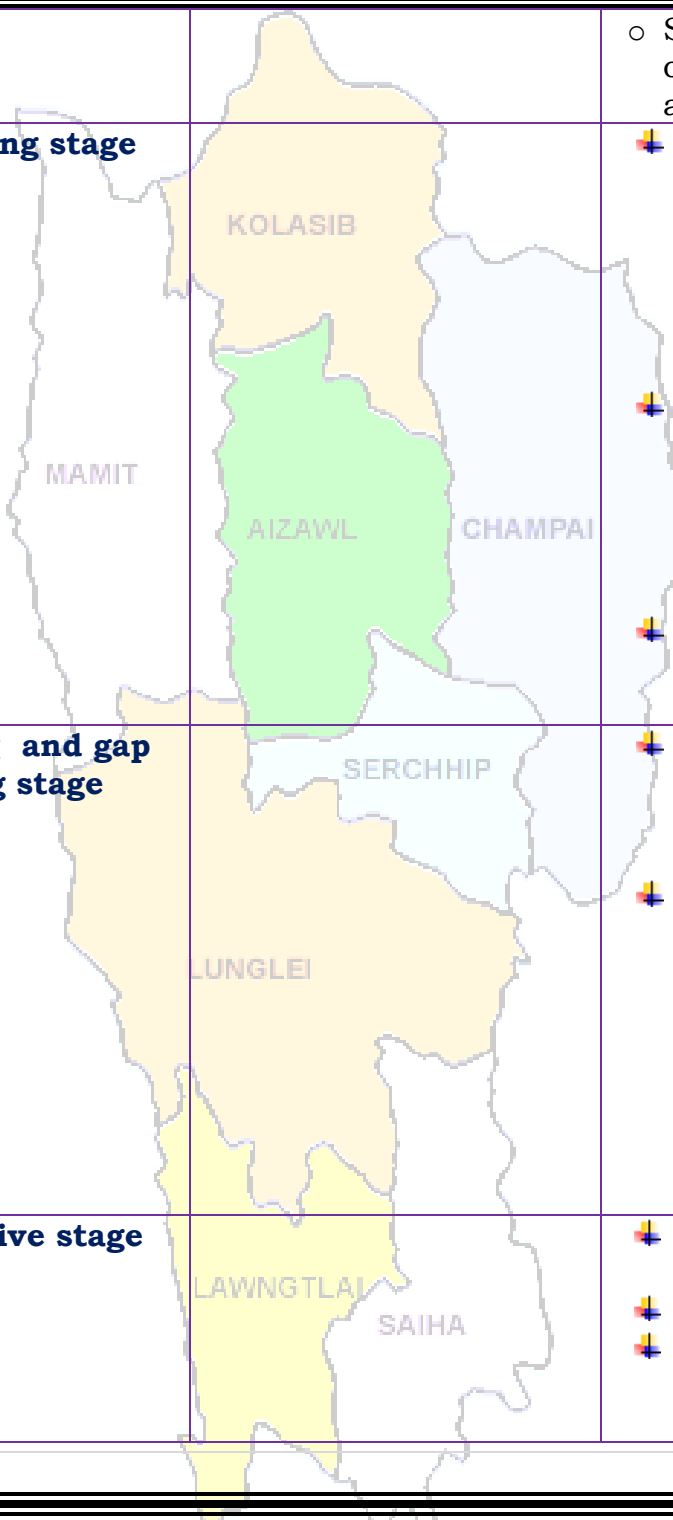
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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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: 19 - 23, September, 2015**

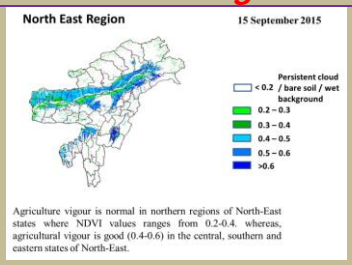
Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue: 18th September, 2015**

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	21	36	25	67	7
Max Temp (oC)	32	34	32	29	27
Min Temp (oC)	19	20	20	18	19
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	98	98	98	99	99
Min RH (%)	49	45	53	71	74
Wind Speed (KmpH)	2	2	2	0	2
***Wind Direction**	S-E	S-E	S-E	E	S

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan	
	Ni 5 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 27-34^{0}C a ni ang a.A vawh lai ber in 18-20^{0}C ni tur ah beisei a ni.RH san lai berin 98-99% leh a hniam lai berin 45-74% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 0-2 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **156.0mm**	
NDVI for Mizoram		NDVI for Mizoram is less than normal NDVI. Value shown that NDVI is zero. So, it represents "Bare Soil".

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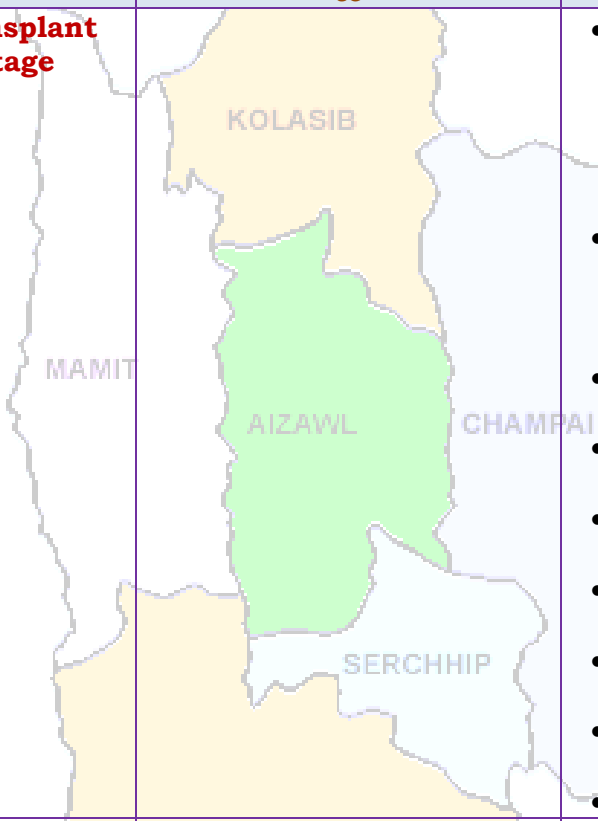
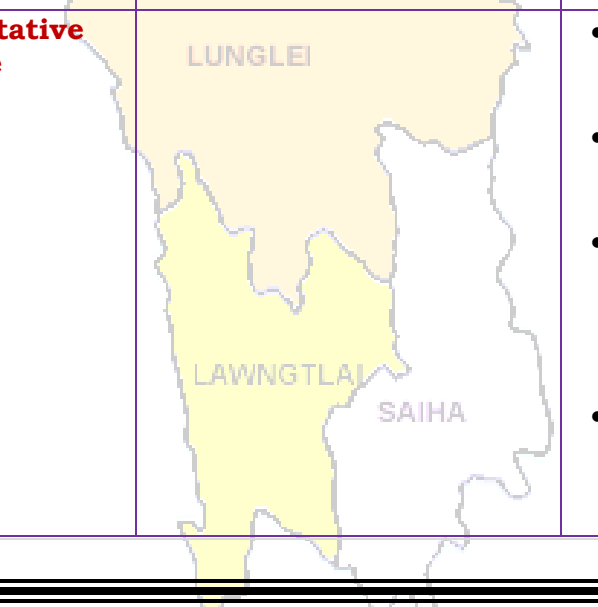
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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		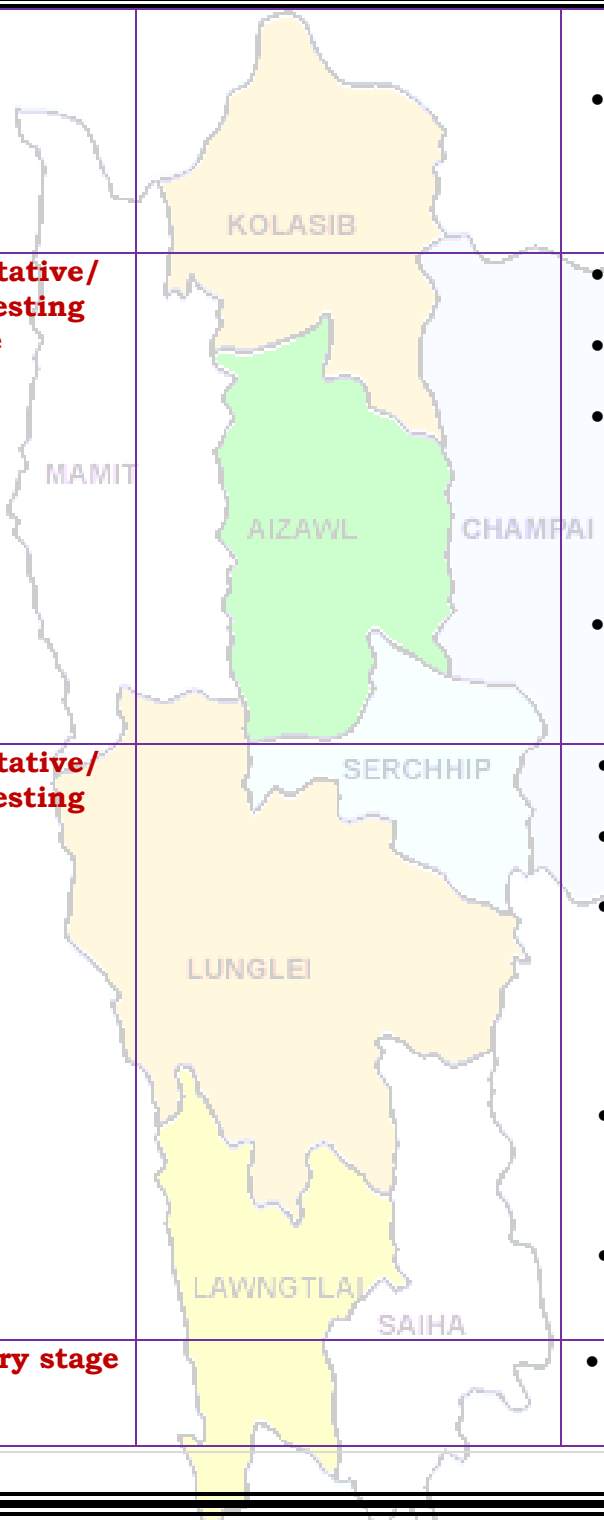	gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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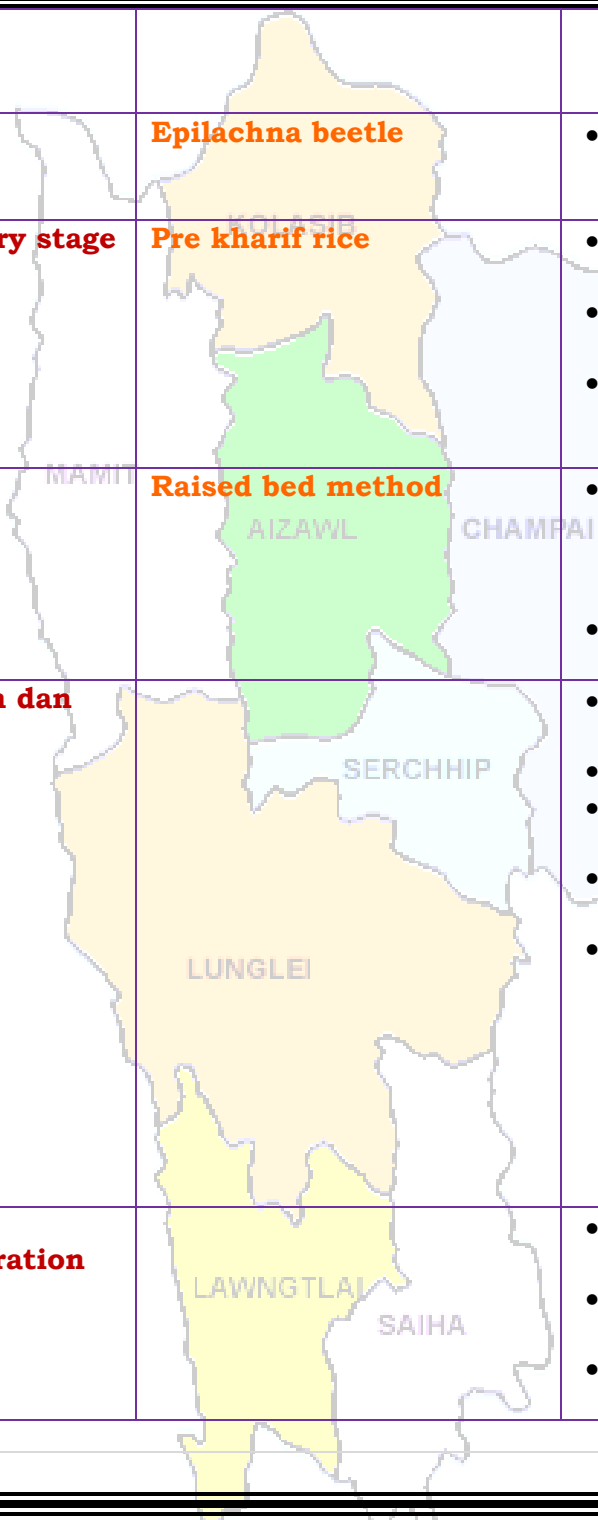
			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.



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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Kolasib **Period: 19 - 23, September, 2015**

Bulletin No: -554/2015/ Bulletin/Mizo **Date of issue: 18th September, 2015**

Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	0	16	14	44	5
Max Temp (oC)	34	36	34	32	29
Min Temp (oC)	21	23	22	22	22
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	97	98	99	99	100
Min RH (%)	53	45	54	57	80
Wind Speed (KmpH)	2	3	2	2	0
*Wind Direction	E	S-E	S-E	E	N-W

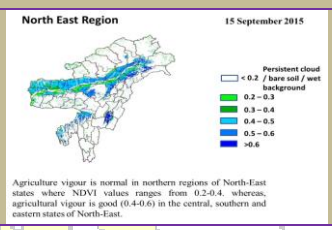
Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

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

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Ni thum kaltha sik leh sa dinhmun tlangpui	September 19, 2015 atanga September 23, 2015 sik leh sa dinhmun hmuhlawk dan
Khua a lum lai berin 25.2-29.1^{0}C leh a vawh lai berin 19.4-20.3^{0}C ani ang a. Chhum tlem a lan beisei ani. Thli tleh dan kawng zawng chu chhim thlang atangin ani a. Maximum RH san lai berin observed 95-98% leh a hniam lai 50-59% ani ang. Ni 3 kal ta chhung a ruah tla zatchu **47.20mm** ani.	Ni 4 lo awm turah hian ruahtui a tlak beisei a ni. Khua a lum lai berin 29-36^{0}C a ni ang a.A vawh lai ber in 21-23^{0}C ni tur ah beisei a ni.RH san lai berin 97-100% leh a hniam lai berin 45-80% ni tur a beisei niin. Thli tleh dan kawng zawng chu chhimchhak lam atangin a nat zawng chu darkar 0-3 km ni tur a beisei niin. Ni nga chhung lo awm tur ah hian chhum tlem a lan beisei a ni. ***Weekly cumulative rainfall:*** **79.0mm**

NDVI for Mizoram



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

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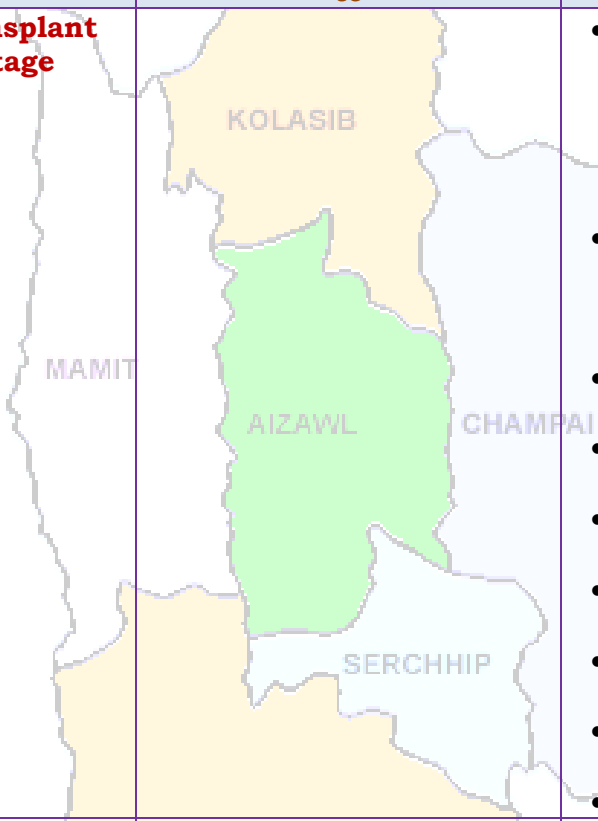
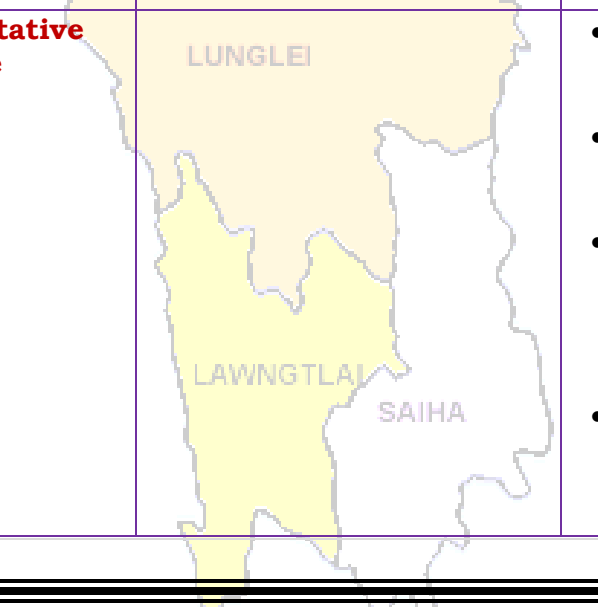
Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin and acid lime	**Transplant stage**		• A chi: A chi chu lakchhuah anih veleh nurseey ah a thuk zawng 1.5-2cm leh 10X5cm a inhlat a chin tur. A rawn chawr chu polythene bag ah hnah 4-6 a neih hunah phun sawn tur. • Nursery chu rannung leh a damlohna dang laka ven nan ser huan atanga meter 500 a hla ah dah tur. • Lei, balu leh bawngek leitha chu a inzat theuha pawlhin pek tur. • Bawngek leitha chu thlai pakhat ah 600:200:100g a pek tur. • Certified thlai chi chauh hman tur. • Ser kung bula tuitling chu paihfai vek tur. • A tiak inchen tlang chauh phun atan hman tur. • A zar tliak leh hnip chu paih fai zel tur. • Thlai chu hrisel taka enkawl tur.
	Vegetative stage		• Gibberellins (10ppm) chu a rah khal that nan te, a rawng insiam nan te kah tur. • Thlai in tui tha taka an hmuh theih nan drip irrigation hman tur. • Ser rah tla hi ser kung khatah vawi 2 a thleng thin a, hemi ven nan hian GA3, urea, benomyl leh carbendazim a hun takah pek tur, • Heng rannung blackfly(kolshi), citrus psylla, leaf miner, bark eating caterpillar, fruit sucking moth, mites, twing blight,

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			gummosis, root rot leh collar rot te hi ven tur. • Fungicide Carbendazim (0.1% emaw 1000ppm) a hun takah pek tur (thlakhat naah leh a seng hma ni 15 ah, chu chu vawi hnih kah tur).
Oil palm	**Vegetative/ harvesting stage**		• Oil palm kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • Oil palm rah chu a puitlin hunah te, a rawng inthlak hunah leh a thlum leh thur a pai tam hunah seng tur.
Balhla	**Vegetative/ harvesting**		• Balhla kung bul chu tihfai a a zar thlak bawk tur. • Leitha chu thlai pakhatah 600:200:100g a pek tur. • Heng micro-nutrients zinc, copper, manganese, iron, boron leh molybdenum te hi an mamawh tawka pek tur, a huan pum a chhiat vek loh nan ven that bawk tur. • A zar thlak ngun hian rannung leh natna lakah a veng a, chubak ah leitha a hek lova, thlai thar a ti tam bawk ani. • A rah chu a puitlin hunah leh a rawng eng a nih hunah seng tur.
Sapthei	**Nursery stage**		• A chi chu a rah hmin tha atanga lak ni se, ni 15-20 hnuah nursery siam tur.

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			• A hnah 2/3 a rawn awm tan hnu ah polythene bag ah phunsawn tur. • Polythene bag atangin thla ¾ hnu ah huan ah phun sawn leh tur. • Bawngek leitha chu khur khat ah 15g leh NPK 100:50:100g in kumkhat chhungin pek tur.
Lakhuihthei	**A par lai**		• A par chhuah hma nan chemical (Ethrel 10ppm+2% urea+0.04% sodium carbonate) chu pek tur. Tlai ah emaw thlaiin hnah 32 a neih hunah pek tur. • Chemical pek atangin ni 55-60 chhungin a par a chhuah thei ang. • Leitha chu thlai pakhat ah 60:50:60g a pek tur. • Thlai hnah leh a zar thi te chu paihfai a, hnim te tihfai bawk tur.
		Corm borer	• Carbofuran 3G chu hectare khatah 1.5kga.i a pek tur. Hemi hi a zung ah a tuina hnuhma a awmin pek tur
Cucurbitaceous crops	**A rah lai**		• Ni 7 danah tui chu tha taka pek tur. • Huan zau thamah chuan fruitfly leh pumpkin beetle ven nan carbaryl 0.2% leh malathion 0.15% chu chini tui litre khatah 10g a pawlhin kar khat danah leh a par tan tirhah leh a rah tan hunah kah tur. • Thlai pakhatah a par nasat lain urea chu 70g a pek tur.
Bawrhsaiabe	**A chin dan**	**1. Nursery tihfai a tui tlem pek tur.** **2. Phunsawn hnuah tui tha taka pek tur.**	• A kung bulthut ah hnim chheh darh tur. • A khat tawkin tui pek tur. • A tiak phunsawn te chu nil eh ruah lakah hliahkhuh tur.

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

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			2.5g emaw Carbendazim 1g chu tui litre khatah pawlhin karkhat danah vawi 2/3 kah tur. • Leaf spot tan Blitox 3g chu tui litre khata pawlhin kah tur.
		Leaf spot leh leaf blotch	• Tui litre khatah Dithane M-45 chu 2.5g emaw Bavistin chu 1g a pawlhin karkhat danah vawi 2/3 kah thin tur. • Leaf spot ah chuan tui litre khatah Blitox chu 3g pawlh a kah thin tur.
French bean	**A par lai**		• Bean hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • A chin atanga ni 20-25 ah bean kung chu mau in a zamna siam tur.
		Blister beetle	• Rannung ho chu mankhawmin thah vek tur. • Cypermethrin 2g chu tui litre khata pawlhin kah thin tur
Bawkbawn	**A chin dan**		• Balu leh leitha chu lei nen a chawhpawlh hnu in 75-100cm a zau ah a phunna tur siam tur. A chinna lai chu Blue copper 100g tui litre 40 ah emaw formaldehyde nen a pawlhin leih tur. • A chi chu 5cm a inhlat a tuh in lei pangngai a vur leh tur.
Tomato	**A chin dan**		• Nursery tur chu lei dip tha darh leh tlema pawng tur (0.8m a zau leh 15cm a sei ni se). • Leitha 10kg leh bawngek leitha 15:15:15 leh carbofuran 2.5g chawhpawlh pek tur.
		Aphids	• Surf tuiin thlai chu kah tur. • Heng insecticides Imidacloprid

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			200SL hi tui litre khatah 0.25ml in emaw Dimethoate 30% EC hi tui litre 10 ah 7ml a kah tur.
		Epilachna beetle	• Methyl parathion 0.5% emaw Dimethoate 0.3% a kah in flea beetle a veng thei
Buh	**Nursery stage**	**Pre kharif rice**	• A chi tha leh khat tha chauh hman tur. • Tui litre 10 ah chi (salt) 250g pawlhin chutah chuan chiah tur. • Bavistin 50WP @0.1% chu tui litre khatah 2g a pawlhin a chi chu chiah tur.
		Raised bed method	• A chin na tur chu 10m a sei ni se, 1.25m a zau leh tui luanna tur 20-30cm a zau siam tur. Hei hian a chi kal ral mai mai tur a veng. • Leitha pek hnu ah a chi damdawi a chiah te chu theh tur.
Vaimim	**A chin dan**		• Lei chu vawi 2/3 laihphut phawt tur. • A chi chu a line indawt a chin tur • A chi chu kg khatah Thiram 4g a chiah tur. • Hectare khatah buh chi chu 20-25kg hman tur. • Bawngek leitha chu hectare khatah 5-10t chu 80:60:40kg N, P2O5 leh K20 hman tur. Vaimim chin hma in lei nen tihpawlh tur. Nitrogen chu a dose chanve in a chin hnu ah pek tur, a bang 25% chu a hnu thlakhat ah leh a dang 25% chu a par hunah pek tur.
Sawhthing leh Aieng	**Land preparation**		• Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. • Lei chu boruak kal that nan laihphut thin tur. • Nitrogen leitha chu an mamawh taw kanga pek tur.

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		Thrips	• Roger emaw Monocrophos chu tui litre khatah 2.5ml a pawlhin kah tur.
		Scales	• Quinalphos emaw Monocrotophos chu tui litre khatah 2.5ml a pawlhin kah tur.
Vawk	**Kumtluanin**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. A natna vei vawk te chu thah a phum tur a ni.
	A puitling hun	**Swine fever.**	2. Vawk thla hnih a nihin SF vaccine pek tur a ni a, he vaccine hi thla ruk emaw kumtluanin pek chhunzawm tur
Bawng	**Kumtluanin**	**Foot and Mouth Disease (FMD)**	• Thla16 a upa an rih in FMD vaccine pek tur a nia, thla 6 danah pek chhunzawm tur a ni.

	A naupan lai	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQ)
			  Thla ruk an tlin hunah vaccine lak tan tur.
			  Kumkhat hnu ah vaccine pek leh tur.

Ar	**Kumtluanin**	**Ranikhet Disease.**	1. Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni.
		Coccidiosis	2. Amprolium emaw coccidiostat pek tur.

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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: Langtlai **Period:** 19 - 23, September, 2015

Bulletin No: -554/2015/ Bulletin/English **Date of issue:** 18th September, 2015

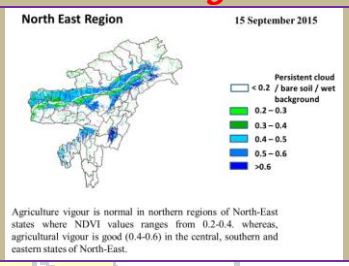
Parameters	19.09.2015	20.09.2015	21.09.2015	22.09.2015	23.09.2015
Rainfall (mm)	10	27	41	53	6
Max Temp (ºC)	33	32	30	27	30
Min Temp (ºC)	21	22	22	20	20
Cloud Coverage	Partially clear	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy
Max RH (%)	96	97	98	98	97
Min RH (%)	54	56	72	89	61
Wind Speed (KmpH)	4	2	2	4	4
*Wind Direction	S-E	N-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- August 1-31, 2015 (*Percent of deviation from normal in parenthesis*)

Aizawl- 313.32mm (387.0mm)	Champhai- 268.78mm (301.30mm)	Saiha- 216.20 mm (367.7mm)	Kolasib- 247.17mm (372.0mm)
Lawngtlai-226.10mm (365.4mm)	Lunglei-370.28mm (371.4mm)	Mamit-197.57mm (376.0mm)	Serchhip-247.35mm (301.8mm)

Weather summary of the past three days	Weather forecast valid from 19th September, 2015 To 23rd September, 2015.
	There are chances of heavy to moderate and light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-33ºC and 20-22ºC. Maximum relative humidity is expected in the range of 96-98% and minimum may from 54-89%. Wind direction would be southeasterly to northeasterly and easterly with the wind speed of 2-4 km per hour. Mainly cloudy sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **137.0 mm**

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

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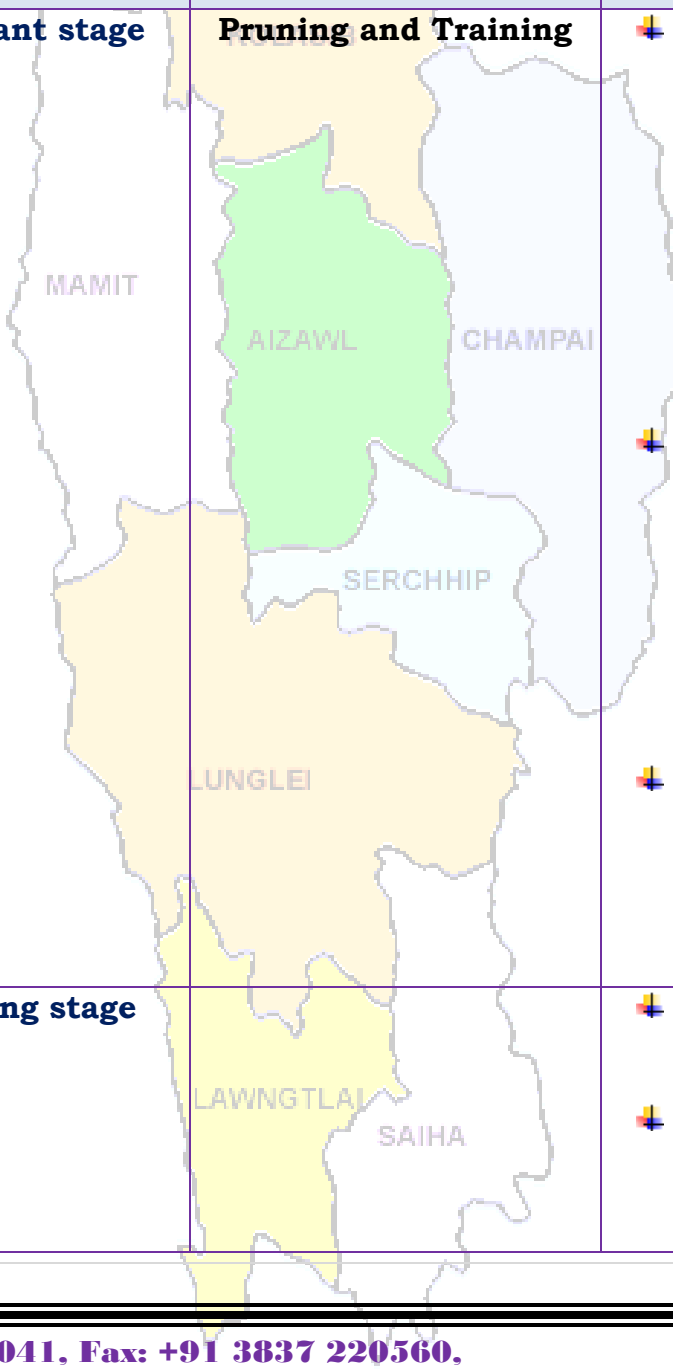
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Transplant stage**	**Pruning and Training**	▪ After 6 months to 1 year from the date of planting, 4-5 well shaped branches spread on all the four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



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		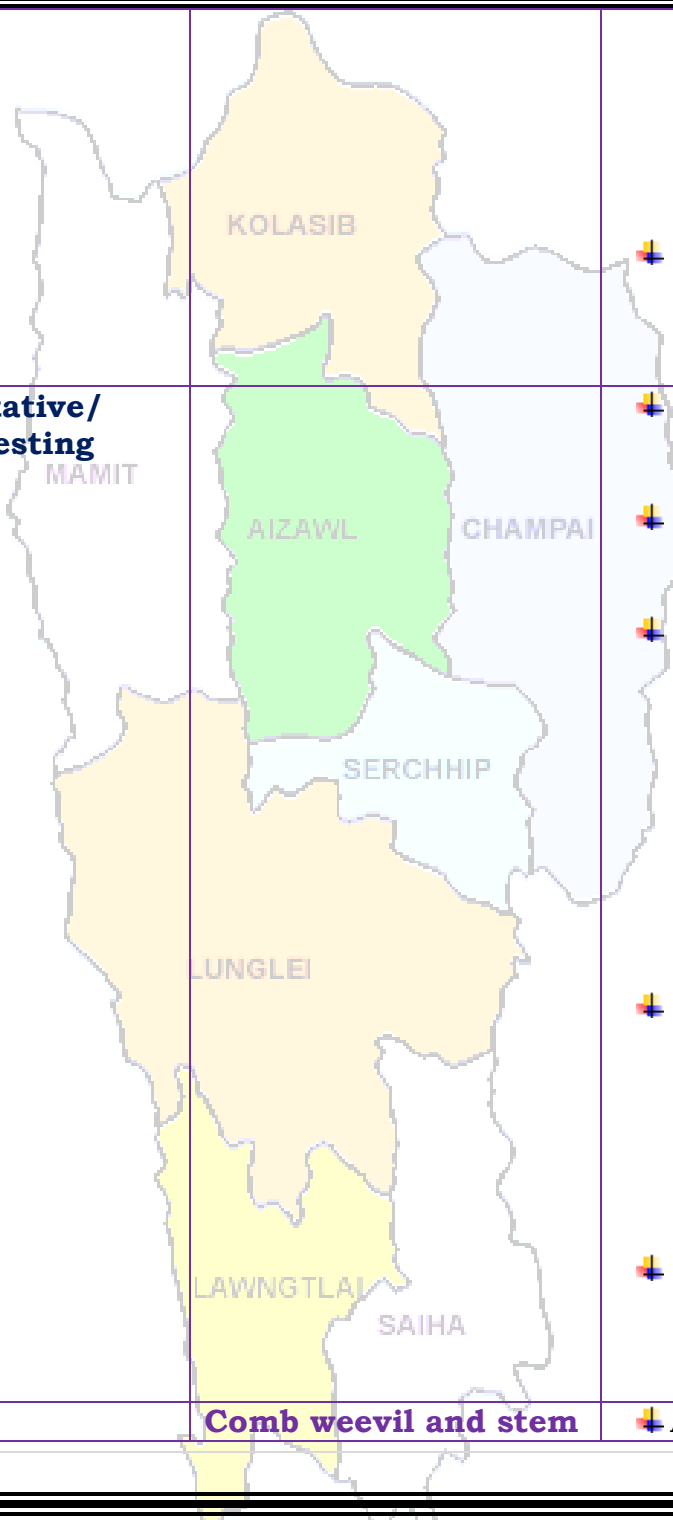	in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Retain sufficient fronds and remove surplus fronds to provide optimal leaf area index (LAI).
Banana	**Vegetative/ harvesting**		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem	Applications of neem

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		weevil	powder effectively controlled weevils. ➢ Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields. ➢ Application of over 100 g or neem oil was phytotoxic (harmful to plants) and uneconomical.
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/ m^2) ➢ Line sowing of seeds (7-10cm)
		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.
		Leaf spot and leaf blotch	○ Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.

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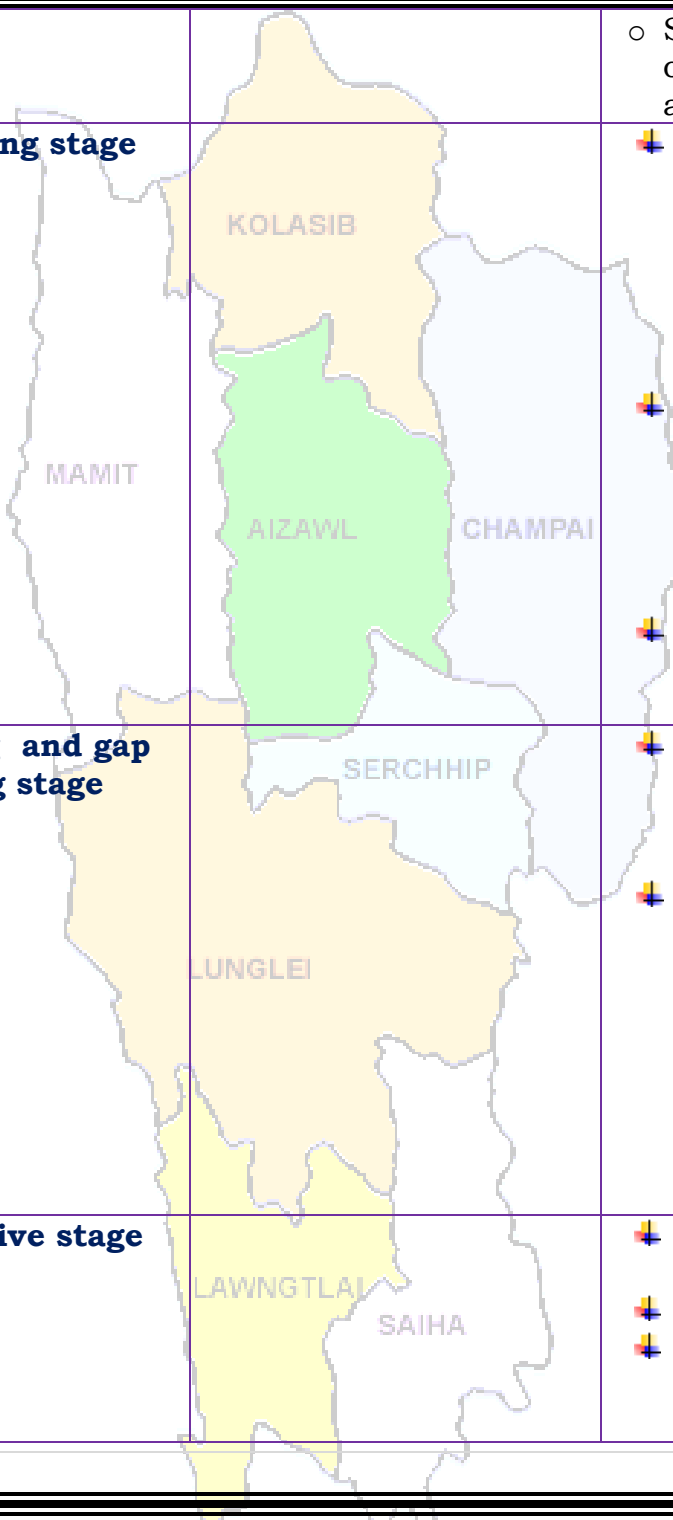
			○ Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Passion Fruit	**Flowering stage**		✦ Application of 217gms, 312 gms, 167gms of Urea, Super and Potash respectively per vine annually in splits for the purple and the yellow variety. ✦ For the Kavari variety 238.7gm, 375gms, 167gms of Urea super, Potash respectively per vine per year in split doses. ✦ Weeding and base clearing near base of the plant
Pineapple	**Planting and gap filling stage**		✦ Double row planting is done by alternating two rows of crops by a wider mound or path. ✦ The pineapple suckers are allowed to dry at least for 25-30 days before planting. In fact, if fresh suckers are planted in moist soil, or if more moisture is available as in rainy season, they may begin to decay.
French bean	**Vegetative stage**		✦ Trilling into bower structure. ✦ Weeding near the plant ✦ Draining of excess water and preparation mound near the base.

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			✓ Apply split dose of nitrogen near base of the plant.
Cowpea	**Vegetative stage**		✓ Trilling into bower structure. ✓ Weeding near the plant ✓ Draining of excess water and preparation mound near the base. ✓ Apply split dose of nitrogen near base of the plant.
Early Cole crop	**Nursery stage**	**Land preparation**	✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol. ✓ Raised bed, nursery bed solarisation. ✓ Bed should be 1m width and conventional length. ✓ Application of FYM (1.5-2.0 kg/ m^2) ✓ Line sowing of seeds (7-10cm)
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @100g/m^2 in nursery is quite effective.
Rice	**Harvesting stage**		✓ Harvest rice crop ✓ Cut residue 20 cm from the base.

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			✦ Open the furrow with the help of furrow opener. ✦ Place FYM and fertilizer. ✦ Place the seed and cover by soil.
Kharif pulses (Green gram, Black gram and Rajma)	**Harvest stage**		✦ 70% of the pod colour turns to dark green to black. ✦ Single cut varieties are harvested at 50-100% flowering stage. In multi cut varieties, the first cut is taken 55 days after sowing and the subsequent at 40 days interval.
Ginger and turmeric	**Vegetative stage**		✦ Remove unwanted plant near base of the plant and cut dead branches. ✦ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. ✦ Earting up of soil along with fertilizer mixture.
		Thrips	✦ Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		Scales	✦ Spray Quinalphos or

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			Monocrotophos (2.5 ml/lt) for controlling scales.
Pig	**All stages**	**Porcine Reproductive Respiratory Syndrome (PRRS).**	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Adult stage**	**Ranikhet Disease.**	• F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds.
	Early stage	**Coccidiosis**	1. Amprolium or coccidiostat

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