GRAMIN KRISHI 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: 26 November – 30 November, 2016**

Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	30	29	29	28	28
Min Temp (ºC)	15	15	14	14	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	40	39	37	39	40
Wind Speed (KmpH)	3	3	3	2	3
***Wind Direction**	E	E	E	E	E

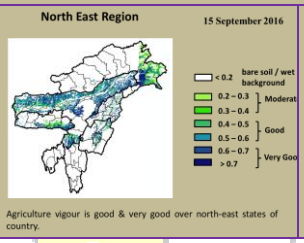
Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

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

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

Weather summary of the past three days	Weather forecast valid from 26th November, 2016 To 30th November, 2016.
Maximum Tem. (ºC):22-24ºC **Minimum Tem. (ºC): 8-11ºC** **Maximum RH (%):80-96%** **Minimum RH (%):55-65%** **Wind Direction: Easterly** **Cloud cover: Mainly cloudy** **Wind speed: 2 km/hr** **Rainfall: 00.0 mm**	There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 28-30ºC and 13-15ºC. Maximum relative humidity is expected in the range of 100% and minimum may from 37-40%. Wind direction would be easterly with the wind speed of 2-3 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:* 00.0 mm**

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
		Fruit fly	✦ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Banana	**Harvesting stage**		✦ Change of colour from green to yellowish. ✦ Fingers are about three quarters full i.e.3/4 of fruit is rounded ✦ Ridges should still be prominent on the remaining quarter of the finger. ✦ Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). ✦ Too early (when the bananas are thin and dark green). ✦ Too late (when they are thick and turning yellow).
		Banana Rhizome weevil	✦ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching

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			stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✚ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
Oil plam	**Harvesting stage**		✚ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✚ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✚ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✚ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✚ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✚ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✚ Crop will be ready for harvest in 6-8 months after planting. ✚ Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated. ✚ Keep the cormels in shed dry.
Tomato	**Vegetative stage**		✚ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✚ Earthing up should also be done after 30 and 45 days of planting. ✚ Staking is very important to support the plants to get more yields and quality should be done after one month of planting.

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			✚ Mulching with black polythene film reduces weed growth, increase crop growth, early bearing and total yield.
		Bacterial wilt	✚ Uproot all infected plant and burn it. ✚ This disease can be minimized by practicing crop rotation. ✚ Soil dranching with Bordeaux mixture (1:1:100) after one month of planting is effective method to manage this disease.
Early Cole crop	**Vegetative stage**		✚ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✚ To produce compact head, the plant should be earthing up 4-5 weeks after transplanting. ✚ Water should be applied at every week interval. ✚ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		N deficiency	✚ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✚ Apply 2% urea solution when this symptom will occur.
		P deficiency	✚ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✚ Apply 4% DAP solution when this symptom will occur.
Onion	**Nursery stage**	**Poly house**	✚ 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)
			✚ 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.
French bean	**Sowing stage**		✚ Variable, healthy, well mature and pure seeds should be sown.

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			↓ Optimum spacing for pole type 60 cm X 30 cm. ↓ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Capsicum	**Nursery stage**	**Poly house**	↓ 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)
			↓ 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.
Carrot and radish	**Sowing stage**		↓ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ↓ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ↓ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ↓ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season. ↓ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Ginger and turmeric	**Maturity stage**		↓ Field must be inspected daily for disease appearance. ↓ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season.

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			✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Zero tillage toria cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, toria under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the toria crops. ✦ Toria crop will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 50 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of toria seeds. Half dose of nitrogen fertilizer along with full dose of phosphorus and potash will apply at the time of sowing. ✦ Seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Soybean	**Vegetative stage**	**Zero tillage**	✦ Clear base of the plant. ✦ Earthing up soil near to plant for better support.
Green gram,	**Vegetative**	**Zero tillage**	✦ Clear base of the plant.

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black gram and French bean (After Pre kharif rice harvest)	**stage**		✦ Earthing up soil near to plant for better support. ✦ For French bean use bamboo for staking or support. ✦ Use split dose of fertilizer for better fruiting for French bean.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter**		✦ Good management and sanitation are

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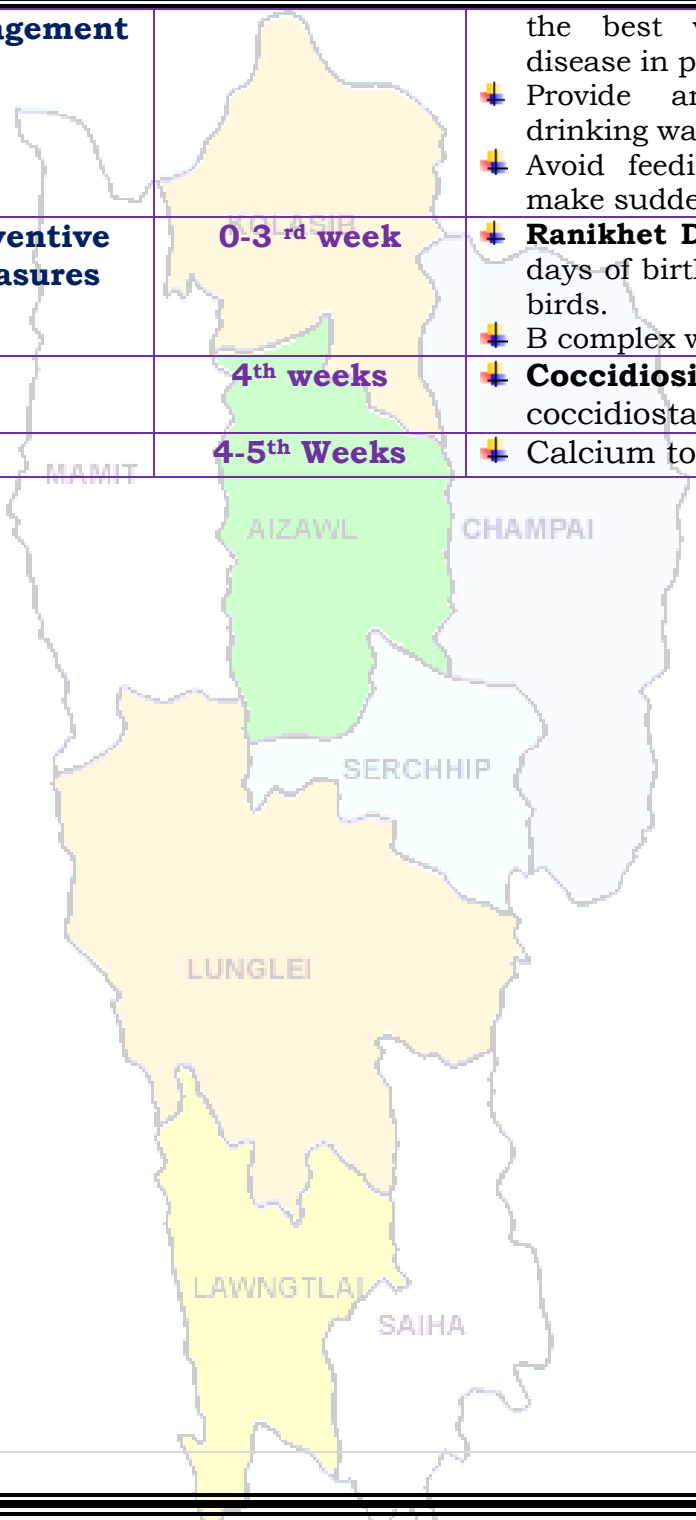
	management		the best ways to avoid infectious disease in poultry. Provide ample quantity of clean drinking water. Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	**Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. B complex with antibodies
		4th weeks	**Coccidiosis-** Amprolium or coccidiostat
		4-5th Weeks	Calcium tonic fortified with B_{12}



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District: Aizawl **Period: 26 November – 30 November, 2016**

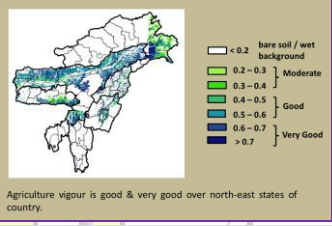
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	30	29	29	28	28
Min Temp (oC)	15	15	14	14	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	40	39	37	39	40
Wind Speed (KmpH)	3	3	3	2	3
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC):22-24oC **Minimum Tem. (oC): 8-11oC** **Maximum RH (%):80-96%** **Minimum RH (%):55-65%** **Wind Direction: Easterly** **Cloud cover: Mainly cloudy** **Wind speed: 2 km/hr** **Rainfall: 00.0 mm**	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 28-30oC a ni ang a. A vawh lai ber in 13-15oC ni tura beisei a ni. RH san lai berin 100% leh a hniam lai berin 37-40% ni tur a rin niin. Thli hi darkar khatah 2-3 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
***/NDVI for Mizoram**	 Agriculture vigour is good & very good over north-east states of country.
	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Tomato	**A chi kui hun**	**A chi kuitiahna hmun tur siam dan**	✚ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✚ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✚ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✚ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar hlat zawng hi 7-10 cm tur a ni.
		Nursery natna (Damping off)	✚ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp) @ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a

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			veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✦ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✦ A rawng chu a hring atangin gold rawngah a inthlak ang. ✦ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✦ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✦ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✦ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✦ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✦ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✦ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni. ✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.

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		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Bekang	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut thin tur.
Green gram, black gram leh French bean (nipui buh seng zawh hunah)	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut rih vur thin tur. ✦ French bean tan bik athlawp tu atan mau hman tur. ✦ A rah athat lehzual nan French bean tan bik chuan mumal takin a in henin leitha pek tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-

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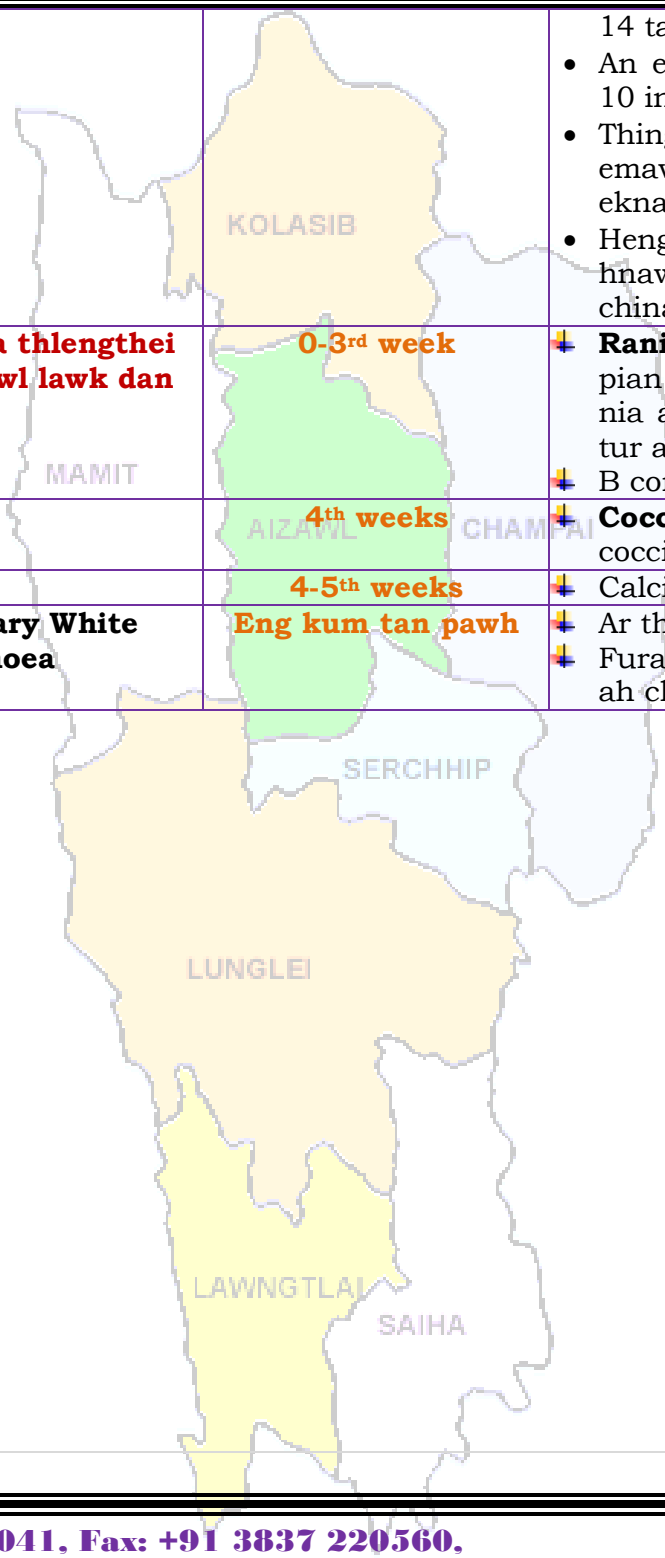
			14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni. ✦ B complex leh antibodies
		4th weeks	✦ **Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	✦ Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	**Eng kum tan pawh**	✦ Ar thi zawng zawng hal ral vak tur ✦ Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman tur.



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Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Champhai **Period: 26 November – 30 November, 2016**

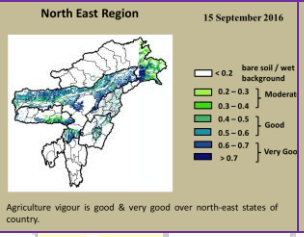
Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	30	30	28	28	28
Min Temp (ºC)	16	15	15	15	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	99	99	99
Min RH (%)	40	38	36	38	40
Wind Speed (KmpH)	4	4	4	3	4
***Wind Direction**	S-E	S-E	S-E	S-E	S-E

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

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

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

Weather summary of the past three days	Weather forecast valid from 26th November, 2016 To 30th November, 2016.
Maximum Tem. (ºC): 23-25ºC **Minimum Tem. (ºC): 8-11ºC** **Maximum RH (%):80-92%** **Minimum RH (%):35-48%** **Wind Direction: Southeasterly** **Cloud cover: Mainly cloudy** **Wind Speed: 2km/hr** **Rainfall: 00.0 mm**	There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 28-30ºC and 13-16ºC. Maximum relative humidity is expected in the range of 99% and minimum may from 36-40%. Wind direction would be southeasterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:* 00.0 mm**
NDVI for Mizoram	 Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8

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			months after planting. - One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. - After this, irrigation has to be withheld to hasten maturity. - Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.
Tomato	**Flowering to fruit formation stage**		- Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. - Drain out excess moisture/water from the base of the plant. - Staking is very important to support the plants to get more yields and quality should be done after one month of planting. - Mulching with black polythene film reduces weed growth, increase crop growth, early bearing and total yield.
		Bacterial wilt	- Uproot all infected plant and burn it. - This disease can be minimized by practicing crop rotation. - Soil dranching with Bordeaux mixture (1:1:100) after one month of planting is effective method to manage this disease.
		Fruit fly	- In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Early Cole crop	**Card formation stage**		- Light irrigation on every alternate day may be given for better establishment and smooth growth. - Mulching must be done after irrigation.

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			✦ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		Cutworm	✦ Prevailing weather is conducive for the attack of cut worm which hide during day time in cracks of the soil and become active at dusk, feed on leave and cut the tender stem. ✦ Apply cypermethrin or carbaryl 2 ml/lt of water or Tricel 1 ml/lt of water in evening every 10 days interval.
		N deficiency	✦ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✦ Apply 2% urea solution when this symptom will occur.
		P deficiency	✦ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✦ Apply 4% DAP solution when this symptom will occur.
Capsicum	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Carrot and radish	**Sowing stage**		✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season.

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			✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Potato	**Sowing**		✦ Prepare the land for potato cultivation without any further delay. ✦ This may help to avoid some bacterial infection at growing stage. ✦ Land may be ploughed thoroughly for proper tillage. ✦ If land is prepared good quality of seeds may be collected for planting. ✦ Cultivation from TPS is also found profitable. ✦ Seed must be treated before sowing.
Onion	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Brussels sprout	**Nursery stage**		✦ 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)
			✦ 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.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown.

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			✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of

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			the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	✚ **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ **Coccidiosis-** Amprolium or coccidiostat

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

District: Champhai **Period:** 26 November – 30 November, 2016

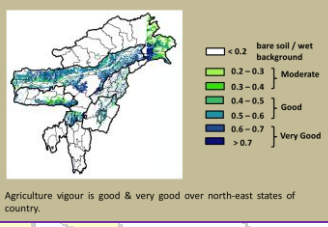
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	30	30	28	28	28
Min Temp (oC)	16	15	15	15	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	99	99	99
Min RH (%)	40	38	36	38	40
Wind Speed (KmpH)	4	4	4	3	4
*Wind Direction	S-E	S-E	S-E	S-E	S-E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC): 23-25oC **Minimum Tem. (oC):** 8-11oC **Maximum RH (%):**80-92% **Minimum RH (%):**35-48% **Wind Direction:** Southeasterly **Cloud cover:** Mainly cloudy **Wind Speed:** 2km/hr **Rainfall:** 00.0 mm	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 28-30oC a ni ang a. A vawh lai ber in 13-16oC ni tura beisei a ni. RH san lai berin 99% leh a hniam lai berin 36-40% ni tur a rin niin. Thli hi darkar khatah 3-4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
NDVI for Mizoram	 Agriculture vigour is good & very good over north-east states of country.
	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Baibing (Local vegetable)	**A seng hun**		✚ A kung bulah hnim a to tur a ni lo. ✚ A rah hmin ho chu seng vek tur. ✚ A kum leh atan a chi dah tur.
Tomato	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin tur. ✚ Phun anih hnu ni 30-45 hnu ah lei chawhphut a rihvur tur. ✚ A kung dawm tu tur in pal ban phun zel ni se, chu chuan a rah that leh a thar tam kawngah apui in a tangkai hle a ni. ✚ Thlai bul tih hnawm nan a polythene dum hman hian hnim to tur a veng a, thlai a thang chak a, a par hma tir a, a thar tam phah tir bawk a ni.
		Bacterial Wilt	✚ Natna vei te chu a zung chawp a pawh phawi a hal ral vek tur. ✚ Thlai chin dan thlakkual (crop rotation) hmangin he natna hi a tih ziaawm theih a ni. ✚ Phun atanga thla khat hnu ah Bordeaux mixture (1:1:100) hmanga lei tih hnawn hi he natna enkawl nan hian a tangkai in a sawt em em a ni.
Early cole crop	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin

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			tur. - Bawr tha tak thar chhuah theih nan phunsawn a nih hnu atanga kar 4-5 thleng a bul chawhphut a lei tih thawl tur a ni. - Kar khat dan zel ah tui pek tur a ni. - A bawr (head) a keh chhiatloh nan a puitlin hun lai velin tui pek tamloh hram tur.
		N tlakchhamna	- He tlakchhamna hi neem cake @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 2 per cent urea hman tur.
		P tlakchhamna	- He tlakchhamna hi phosphorus based fertilizer @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 4 per cent DAP hman tur.
Capsicum	**A chi kui hun**	**Poly house**	- Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. - A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. - FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. - A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			- A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. - A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.

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Purunsen	**A chi kui hun**	**Poly house**	✦ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✦ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✦ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✦ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			✦ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. ✦ A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.
French Bean	**A chi theh hun**		✦ A chi danglam leh hrisel, chang tha leh thianghlim chiah theh tur. ✦ Thing ngul hmang chi tan a chi theh inkar tur chu 60cm x 60 cm a ni. ✦ A chi theh hma in a chi chu hectare khat ah Rhizobium vermicompost 10t hmang a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✦ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✦ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp)

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			@ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✚ A rawng chu a hring atangin gold rawngah a inthlak ang. ✚ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✚ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✚ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✚ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✚ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✚ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✚ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni.

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			✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.
		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a

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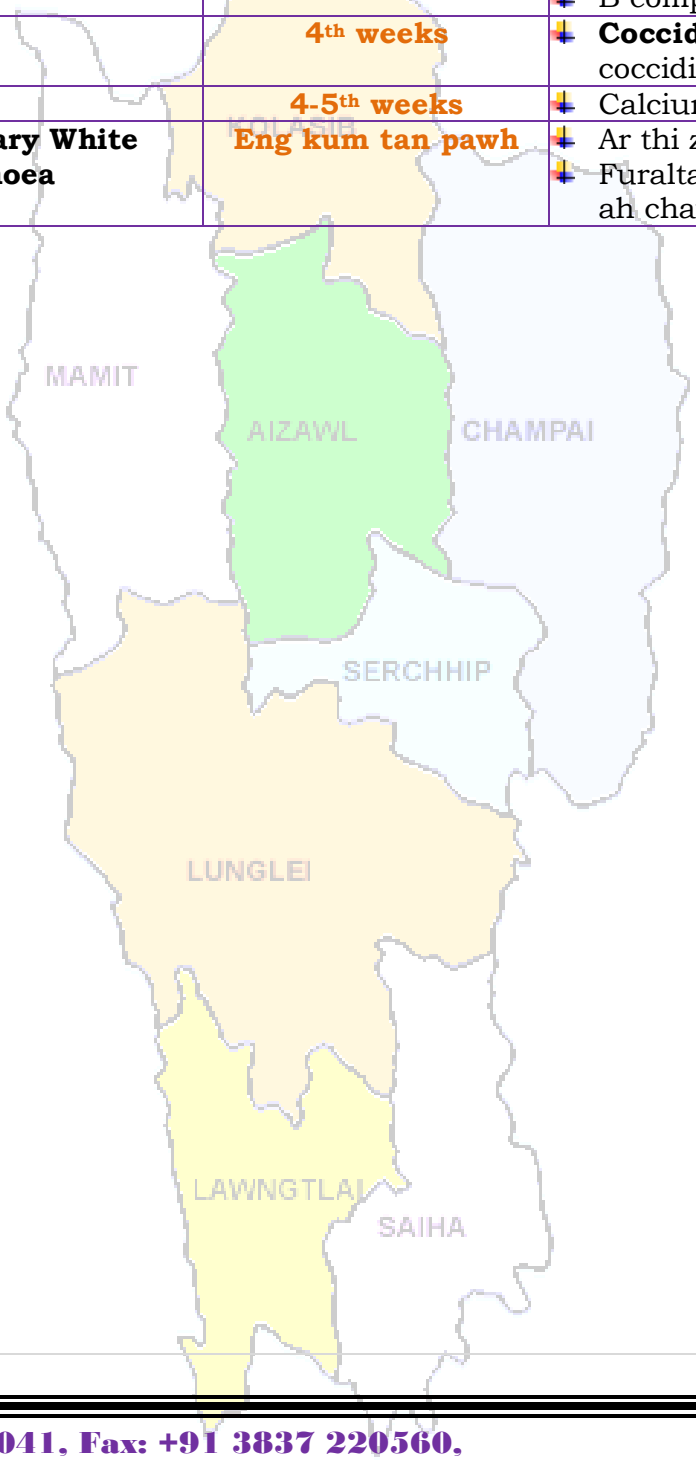
			nia an puitlin hunah R_2B pek leh tur a ni. B complex leh antibodies
		4th weeks	**Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	Eng kum tan pawh	Ar thi zawng zawng hal ral vak tur Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman 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: Kolasib **Period: 26 November – 30 November, 2016**

Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	30	29	29	28	28
Min Temp (ºC)	15	15	14	14	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	97	100	97	99	97
Min RH (%)	40	40	39	40	41
Wind Speed (KmpH)	4	4	4	3	4
*Wind Direction	E	E	E	E	E

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

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

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

Weather summary of the past three days

Maximum Tem. (ºC):22-24ºC
Minimum Tem. (ºC):09-12ºC
Maximum RH (%):88-91%
Minimum RH (%):37-45%
Wind Direction: southeasterly
Cloud cover: Mainly cloudy
Wind speed: 2 km/hr

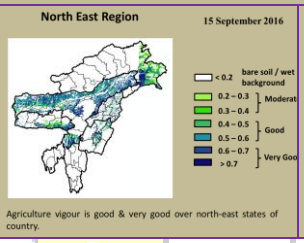
Rainfall: 00.0 mm

Weather forecast valid from 26th November, 2016 To 30th November, 2016.

There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 28-30ºC and 13-15ºC. Maximum relative humidity is expected in the range of 97-100% and minimum may from 39-41%. Wind direction would be easterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: **00.0 mm**

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
		Fruit fly	✦ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Banana	**Harvesting stage**		✦ Change of colour from green to yellowish. ✦ Fingers are about three quarters full i.e.3/4 of fruit is rounded ✦ Ridges should still be prominent on the remaining quarter of the finger. ✦ Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). ✦ Too early (when the bananas are thin and dark green). ✦ Too late (when they are thick and turning yellow).
		Banana Rhizome weevil	✦ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching

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			stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✦ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
		Banana beetle	✦ Removal of weeds from basin ✦ Removal of unwanted sucker ✦ Application of alphamethrin @ 0.01%.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8 months after planting. ✦ One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. ✦ After this, irrigation has to be withheld to hasten maturity. ✦ Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.

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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.
Early Cole crop	**Vegetative stage**		✚ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✚ To produce compact head, the plant should be earthing up 4-5 weeks after transplanting. ✚ Water should be applied at every week interval. ✚ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		N deficiency	✚ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✚ Apply 2% urea solution when this symptom will occur.
		P deficiency	✚ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✚ Apply 4% DAP solution when this symptom will occur.
Onion	**Nursery stage**	**Poly house**	✚ 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)
			✚ 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

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			at 10-15 DAS are effective.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown. ✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Kharif Rice	**Harvesting stage**		✦ Colour turns to green to light gold. ✦ Harvesting of rice was done manually by leaving about 20 cm standing stubbles in the field. ✦ Keep harvesting sample in sun for drying.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Zero tillage toria	**Sowing stage**		✦ After harvesting of rice, toria under no-till system.

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cultivation in rice fellow			✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the toria crops. ✦ Toria crop will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 50 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of toria seeds. Half dose of nitrogen fertilizer along with full dose of phosphorus and potash will apply at the time of sowing. ✦ Seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Soybean	**Vegetative stage**	**Zero tillage**	✦ Clear base of the plant. ✦ Earthing up soil near to plant for better support.
Green gram, black gram and French bean (After Pre kharif rice harvest)	**Vegetative stage**	**Zero tillage**	✦ Clear base of the plant. ✦ Earthing up soil near to plant for better support. ✦ For French bean use bamboo for staking or support. ✦ Use split dose of fertilizer for better fruiting for French bean.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of

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		Porcine Reproductive Respiratory Syndrome (PRRS).	1. Culling of positive pigs or piglets.
	Adult stage	**Swine fever.**	2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval
Cattle	**All age group**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	✚ **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ **Coccidiosis-** Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B_{12}
Fish	**All age group**		✚ An extra dose of Lime @ 200 kg per ha may be applied to prevent the outbreak of EUS (ulcer disease). ✚ Feeding and fertilizer need to be analyzed as per the depth of the water body. ✚ If the depth of water body drop below 1 mt, cut short the feeding and fertilizer

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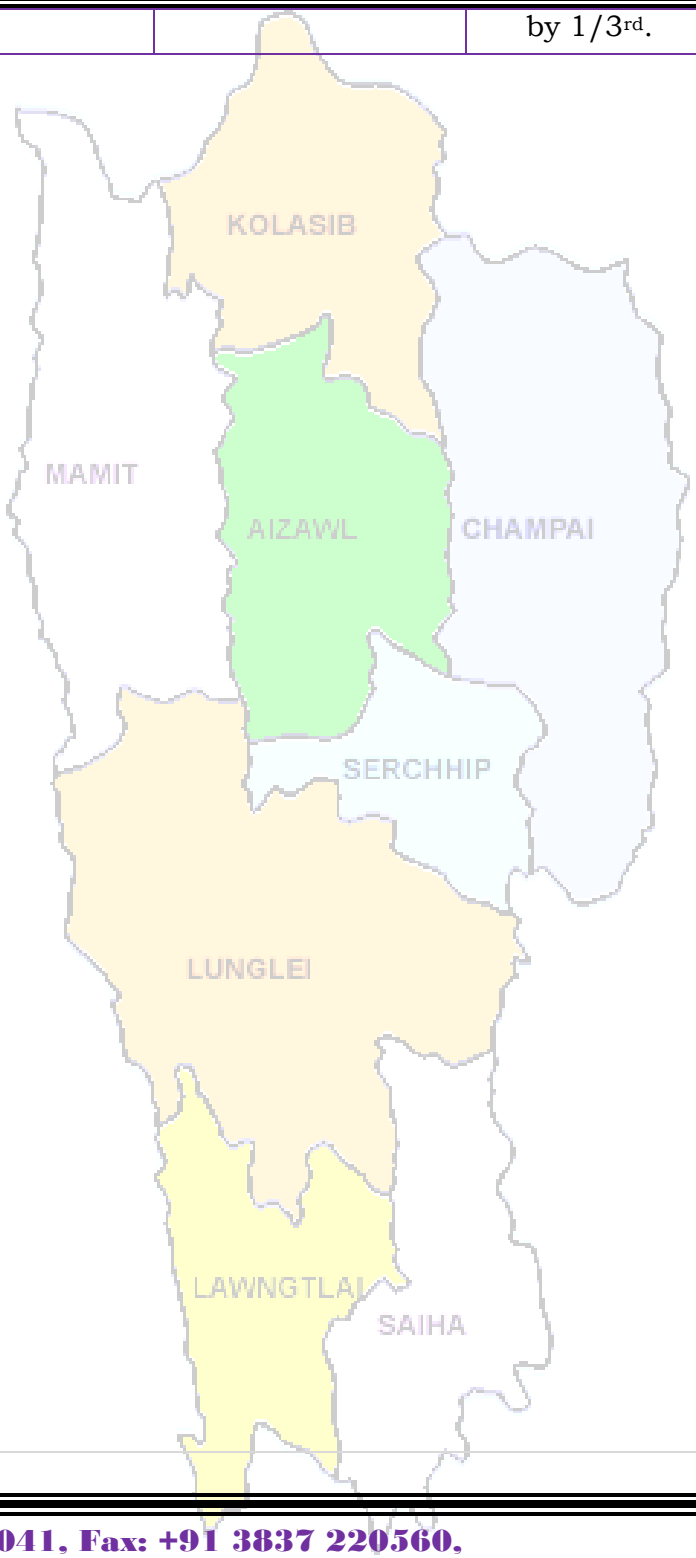
			by 1/3rd.



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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: Kolasib **Period:** 26 November – 30 November, 2016

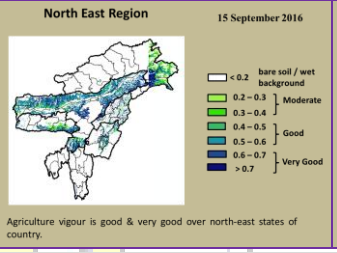
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	30	29	29	28	28
Min Temp (oC)	15	15	14	14	13
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	97	100	97	99	97
Min RH (%)	40	40	39	40	41
Wind Speed (KmpH)	4	4	4	3	4
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC):22-24oC **Minimum Tem. (oC):09-12oC** **Maximum RH (%):88-91%** **Minimum RH (%):37-45%** **Wind Direction: southeasterly** **Cloud cover: Mainly cloudy** **Wind speed: 2 km/hr** **Rainfall: 00.0 mm**	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 28-30oC a ni ang a. A vawh lai ber in 13-15oC ni tura beisei a ni. RH san lai berin 97-100% leh a hniam lai berin 39-41% ni tur a rin niin. Thli hi darkar khatah 3-4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
*/NDVI for Mizoram	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✚ A bul vela hnim to tihfai tur ✚ A no rawn chawr thar mamawh loh te paih tur ✚ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✚ A nu leh pa par hma lutuk te thenfai tur ✚ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✚ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✚ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✚ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✚ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✚ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✚ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Tomato	**A chi kui hun**	**A chi kuitiahna hmun tur siam dan**	✚ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✚ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✚ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✚ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar hlat zawng hi 7-10 cm tur a ni.
		Nursery natna (Damping off)	✚ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp) @ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a

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			veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✦ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✦ A rawng chu a hring atangin gold rawngah a inthlak ang. ✦ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✦ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✦ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✦ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✦ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✦ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✦ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni. ✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.

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		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Bekang	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut thin tur.
Green gram, black gram leh French bean (nipui buh seng zawh hunah)	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut rih vur thin tur. ✦ French bean tan bik athlawp tu atan mau hman tur. ✦ A rah athat lehzual nan French bean tan bik chuan mumal takin a in henin leitha pek tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-

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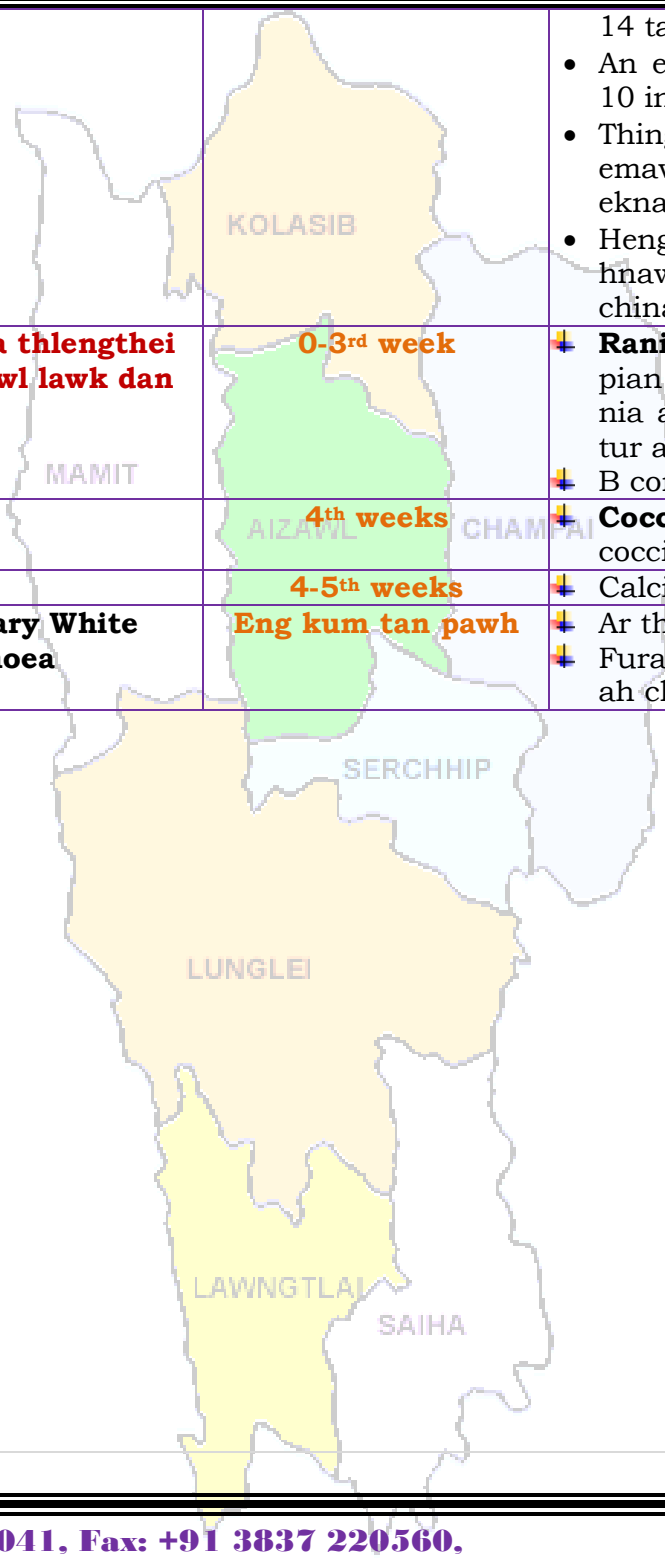
			14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni. ✦ B complex leh antibodies
		4th weeks	✦ **Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	✦ Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	**Eng kum tan pawh**	✦ Ar thi zawng zawng hal ral vak tur ✦ Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman 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: Lawngtlai **Period: 26 November – 30 November, 2016**

Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

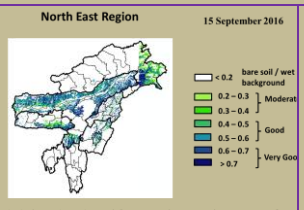
Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	29	29	29	28	27
Min Temp (ºC)	14	14	13	12	12
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	96	95	95	95	96
Min RH (%)	44	37	34	38	37
Wind Speed (KmpH)	4	4	4	4	4
***Wind Direction**	E	E	E	E	E

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

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

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

Weather summary of the past three days	Weather forecast valid from 26th November, 2016 To 30th November, 2016.
Maximum Tem. (ºC):23-25ºC **Minimum Tem. (ºC):** 11-14ºC **Maximum RH (%):**85-92% **Minimum RH (%):**40-50% **Wind Direction:** Northeasterly **Cloud cover:** Mainly cloudy **Wind speed:** 2 km/hr **Rainfall:** 00.0 mm	There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-29ºC and 12-14ºC. Maximum relative humidity is expected in the range of 95-96% and minimum may from 34-44%. Wind direction would be easterly with the wind speed of 4 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **00.0 mm**

NDVI for Mizoram		
	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
		Fruit fly	✦ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Banana	**Harvesting stage**		✦ Change of colour from green to yellowish. ✦ Fingers are about three quarters full i.e.3/4 of fruit is rounded ✦ Ridges should still be prominent on the remaining quarter of the finger. ✦ Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). ✦ Too early (when the bananas are thin and dark green). ✦ Too late (when they are thick and turning yellow).
		Banana Rhizome weevil	✦ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching

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			stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✦ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
		Banana beetle	✦ Removal of weeds from basin ✦ Removal of unwanted sucker ✦ Application of alphamethrin @ 0.01%.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8 months after planting. ✦ One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. ✦ After this, irrigation has to be withheld to hasten maturity. ✦ Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.

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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.
Early Cole crop	**Vegetative stage**		✦ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✦ To produce compact head, the plant should be earthing up 4-5 weeks after transplanting. ✦ Water should be applied at every week interval. ✦ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		N deficiency	✦ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✦ Apply 2% urea solution when this symptom will occur.
		P deficiency	✦ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✦ Apply 4% DAP solution when this symptom will occur.
Onion	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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

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			at 10-15 DAS are effective.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown. ✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Carrot and radish			✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season. ✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Kharif Rice	**Harvesting stage**		✦ Colour turns to green to light gold. ✦ Harvesting of rice was done manually by leaving about 20 cm standing

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			stubbles in the field. Keep harvesting sample in sun for drying.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		After harvesting of rice, pea and lentil will sow under no-till system. The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Zero tillage toria cultivation in rice fellow	**Sowing stage**		After harvesting of rice, toria under no-till system. The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the toria crops. Toria crop will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. A recommended dose of 50 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of toria seeds. Half dose of nitrogen fertilizer along with full dose of phosphorus and potash will apply at the time of sowing. Seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Soybean	**Vegetative stage**	**Zero tillage**	Clear base of the plant. Earthing up soil near to plant for better support.
Green gram, black gram	**Vegetative stage**	**Zero tillage**	Clear base of the plant. Earthing up soil near to plant for better

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and French bean (After Pre kharif rice harvest)			support. For French bean use bamboo for staking or support. Use split dose of fertilizer for better fruiting for French bean.
Pig	**All stages**	**Swine flu**	Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		Good management and sanitation are the best ways to avoid infectious

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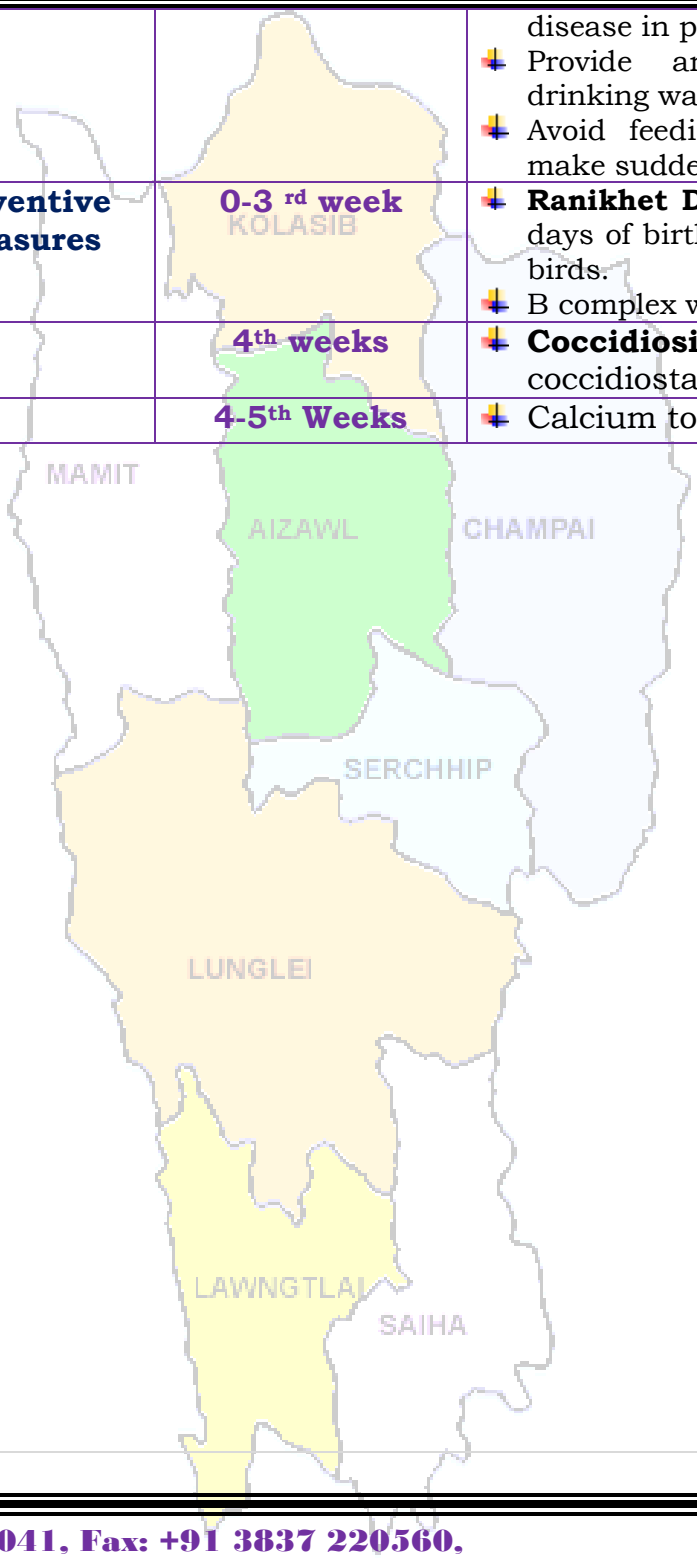
			disease in poultry. - Provide ample quantity of clean drinking water. - Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	- **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. - B complex with antibodies
		4th weeks	- **Coccidiosis-** Amprolium or coccidiostat
		4-5th Weeks	- Calcium tonic fortified with B_{12}



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

District: Lawngtlai **Period:** 26 November – 30 November, 2016

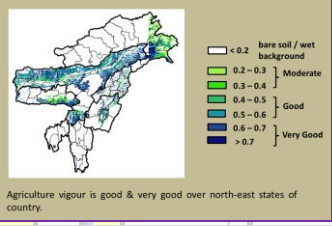
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	29	29	29	28	27
Min Temp (oC)	14	14	13	12	12
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	96	95	95	95	96
Min RH (%)	44	37	34	38	37
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC):23-25oC **Minimum Tem. (oC): 11-14oC** **Maximum RH (%):85-92%** **Minimum RH (%):40-50%** **Wind Direction: Northeasterly** **Cloud cover: Mainly cloudy** **Wind speed: 2 km/hr** **Rainfall: 00.0 mm**	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 27-29oC a ni ang a. A vawh lai ber in 12-14oC ni tura beisei a ni. RH san lai berin 95-96% leh a hniam lai berin 34-44% ni tur a rin niin. Thli hi darkar khatah 4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
***/NDVI for Mizoram**	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✚ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✚ A bul vela hnim to tihfai tur ✚ A no rawn chawr thar mamawh loh te paih tur ✚ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✚ A nu leh pa par hma lutuk te thenfai tur ✚ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✚ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✚ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✚ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✚ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✚ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✚ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Tomato	**A chi kui hun**	**A chi kuitiahna hmun tur siam dan**	✚ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✚ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✚ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✚ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar hlat zawng hi 7-10 cm tur a ni.
		Nursery natna (Damping off)	✚ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp) @ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a

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			veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		A rawng chu a hring atangin gold rawngah a inthlak ang. Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni. Lekhachhaih hi sava hlauh atan hman thin a ni bawk.

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		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Bekang	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut thin tur.
Green gram, black gram leh French bean (nipui buh seng zawh hunah)	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut rih vur thin tur. ✦ French bean tan bik athlawp tu atan mau hman tur. ✦ A rah athat lehzual nan French bean tan bik chuan mumal takin a in henin leitha pek tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-

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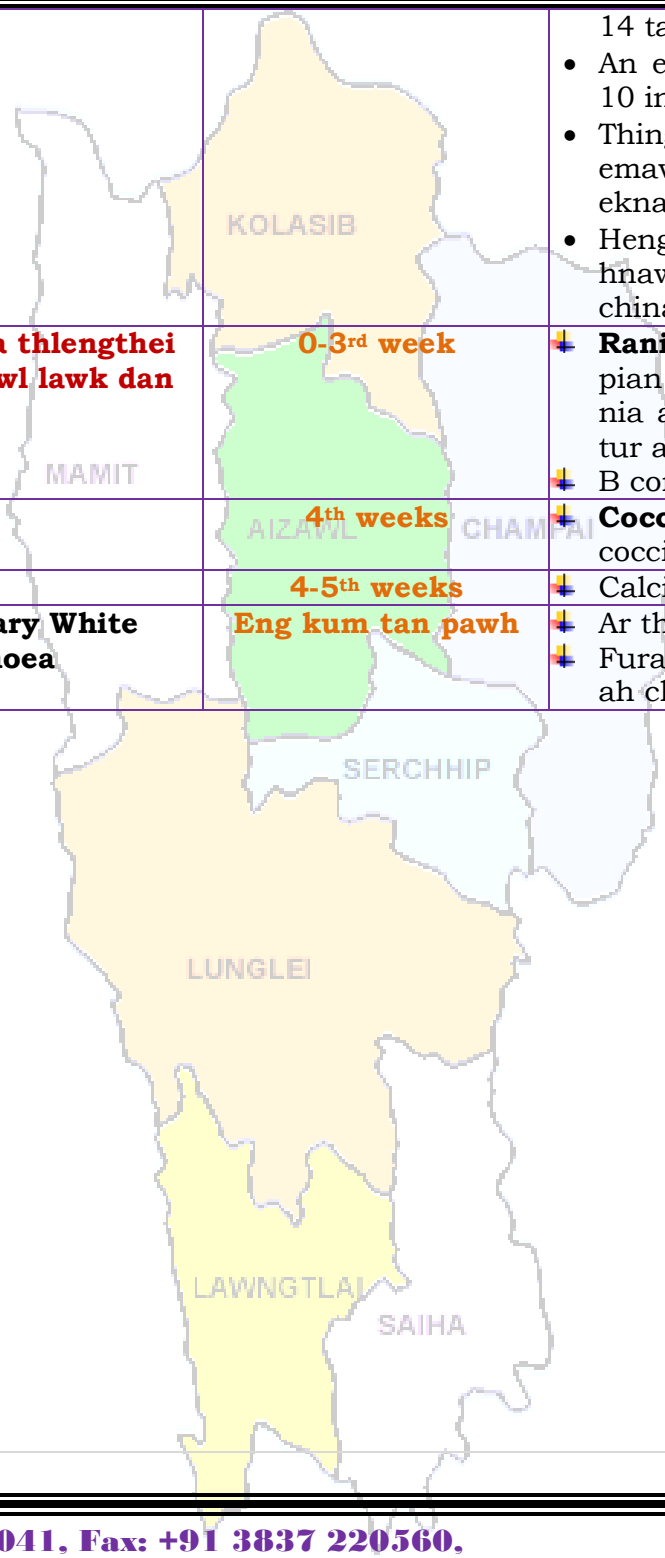
			14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni. ✦ B complex leh antibodies
		4th weeks	✦ **Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	✦ Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	**Eng kum tan pawh**	✦ Ar thi zawng zawng hal ral vak tur ✦ Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman tur.



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

District: Lunglei **Period: 26 November – 30 November, 2016**

Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	29	29	29	28	27
Min Temp (ºC)	13	12	11	11	10
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	99	99	99
Min RH (%)	39	35	30	34	34
Wind Speed (KmpH)	4	4	4	3	4
*Wind Direction	E	E	E	E	E

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

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

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

Weather summary of the past three days

Maximum Tem. (ºC): 20-25ºC
Minimum Tem. (ºC): 8-11ºC
Maximum RH (%):80-92%
Minimum RH (%):35-48%
Wind Direction: Southeasterly
Cloud cover: Mainly cloudy
Wind Speed: 2km/hr

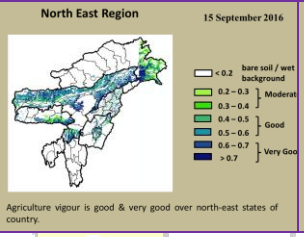
Rainfall: 00.0 mm

Weather forecast valid from 26th November, 2016 To 30th November, 2016.

There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-29ºC and 10-13ºC. Maximum relative humidity is expected in the range of 99% and minimum may from 30-39%. Wind direction would be southerly to southeasterly to southerly to southerly and southeasterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: **00.0 mm**

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8

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			months after planting. - One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. - After this, irrigation has to be withheld to hasten maturity. - Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.
Tomato	**Flowering to fruit formation stage**		- Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. - Drain out excess moisture/water from the base of the plant. - Staking is very important to support the plants to get more yields and quality should be done after one month of planting. - Mulching with black polythene film reduces weed growth, increase crop growth, early bearing and total yield.
		Bacterial wilt	- Uproot all infected plant and burn it. - This disease can be minimized by practicing crop rotation. - Soil dranching with Bordeaux mixture (1:1:100) after one month of planting is effective method to manage this disease.
		Fruit fly	- In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Early Cole crop	**Card formation stage**		- Light irrigation on every alternate day may be given for better establishment and smooth growth. - Mulching must be done after irrigation.

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			✦ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		Cutworm	✦ Prevailing weather is conducive for the attack of cut worm which hide during day time in cracks of the soil and become active at dusk, feed on leave and cut the tender stem. ✦ Apply cypermethrin or carbaryl 2 ml/lt of water or Tricel 1 ml/lt of water in evening every 10 days interval.
		N deficiency	✦ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✦ Apply 2% urea solution when this symptom will occur.
		P deficiency	✦ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✦ Apply 4% DAP solution when this symptom will occur.
Capsicum	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Carrot and radish	**Sowing stage**		✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season.

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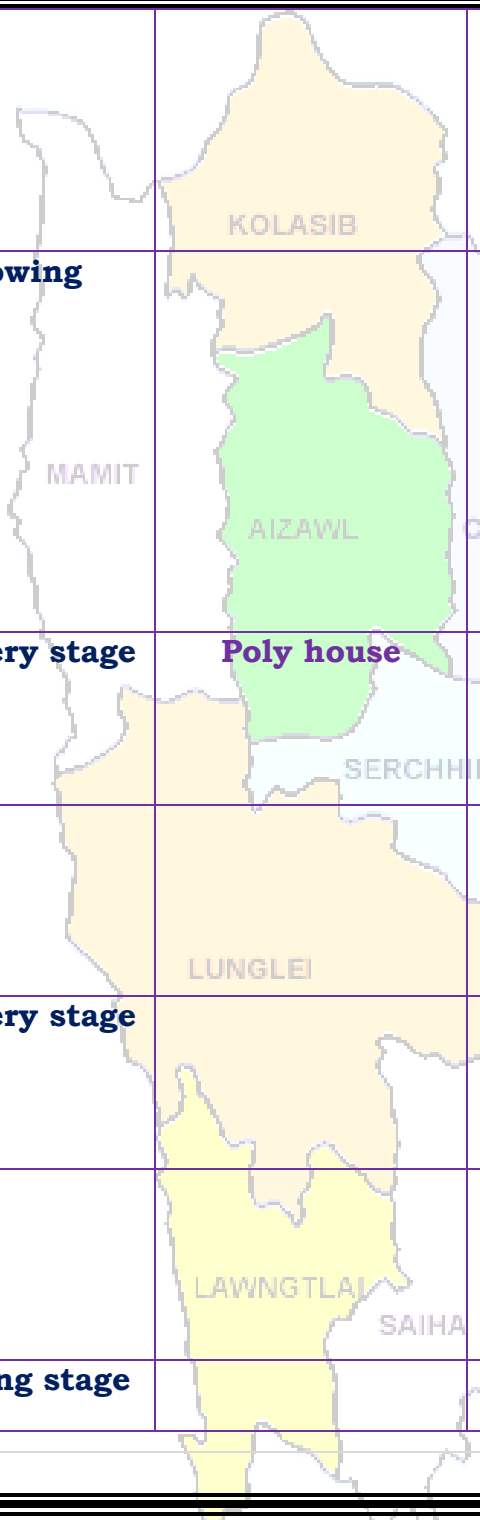
			✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Potato	**Sowing**		✦ Prepare the land for potato cultivation without any further delay. ✦ This may help to avoid some bacterial infection at growing stage. ✦ Land may be ploughed thoroughly for proper tillage. ✦ If land is prepared good quality of seeds may be collected for planting. ✦ Cultivation from TPS is also found profitable. ✦ Seed must be treated before sowing.
Onion	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Brussels sprout	**Nursery stage**		✦ 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)
			✦ 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.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown.



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			✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of

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			the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	✚ **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ **Coccidiosis-** Amprolium or coccidiostat

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Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Lunglei **Period: 26 November – 30 November, 2016**

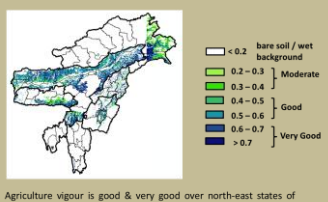
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue: 25th November, 2016**

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	29	29	29	28	27
Min Temp (oC)	13	12	11	11	10
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	99	99	99
Min RH (%)	39	35	30	34	34
Wind Speed (KmpH)	4	4	4	3	4
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC): 20-25oC **Minimum Tem. (oC): 8-11oC** **Maximum RH (%):80-92%** **Minimum RH (%):35-48%** **Wind Direction: Southeasterly** **Cloud cover: Mainly cloudy** **Wind Speed: 2km/hr** **Rainfall: 00.0 mm**	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 27-29oC a ni ang a. A vawh lai ber in 10-13oC ni tura beisei a ni. RH san lai berin 99% leh a hniam lai berin 30-39% ni tur a rin niin. Thli hi darkar khatah 3-4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:* 00.0mm**
NDVI for Mizoram	 Agriculture vigour is good & very good over north-east states of country.
	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Baibing (Local vegetable)	**A seng hun**		✚ A kung bulah hnim a to tur a ni lo. ✚ A rah hmin ho chu seng vek tur. ✚ A kum leh atan a chi dah tur.
Tomato	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin tur. ✚ Phun anih hnu ni 30-45 hnu ah lei chawhphut a rihvur tur. ✚ A kung dawm tu tur in pal ban phun zel ni se, chu chuan a rah that leh a thar tam kawngah apui in a tangkai hle a ni. ✚ Thlai bul tih hnawm nan a polythene dum hman hian hnim to tur a veng a, thlai a thang chak a, a par hma tir a, a thar tam phah tir bawk a ni.
		Bacterial Wilt	✚ Natna vei te chu a zung chawp a pawh phawi a hal ral vek tur. ✚ Thlai chin dan thlakkual (crop rotation) hmangin he natna hi a tih ziaawm theih a ni. ✚ Phun atanga thla khat hnu ah Bordeaux mixture (1:1:100) hmanga lei tih hnawn hi he natna enkawl nan hian a tangkai in a sawt em em a ni.
Early cole crop	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin

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			tur. - Bawr tha tak thar chhuah theih nan phunsawn a nih hnu atanga kar 4-5 thleng a bul chawhphut a lei tih thawl tur a ni. - Kar khat dan zel ah tui pek tur a ni. - A bawr (head) a keh chhiatloh nan a puitlin hun lai velin tui pek tamloh hram tur.
		N tlakchhamna	- He tlakchhamna hi neem cake @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 2 per cent urea hman tur.
		P tlakchhamna	- He tlakchhamna hi phosphorus based fertilizer @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 4 per cent DAP hman tur.
Capsicum	**A chi kui hun**	**Poly house**	- Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. - A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. - FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. - A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			- A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. - A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.

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Purunsen	**A chi kui hun**	**Poly house**	✦ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✦ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✦ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✦ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			✦ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. ✦ A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.
French Bean	**A chi theh hun**		✦ A chi danglam leh hrisel, chang tha leh thianghlim chiah theh tur. ✦ Thing ngul hmang chi tan a chi theh inkar tur chu 60cm x 60 cm a ni. ✦ A chi theh hma in a chi chu hectare khat ah Rhizobium vermicompost 10t hmang a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✦ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✦ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp)

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			@ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✚ A rawng chu a hring atangin gold rawngah a inthlak ang. ✚ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✚ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✚ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✚ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✚ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✚ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✚ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni.

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			✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.
		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a

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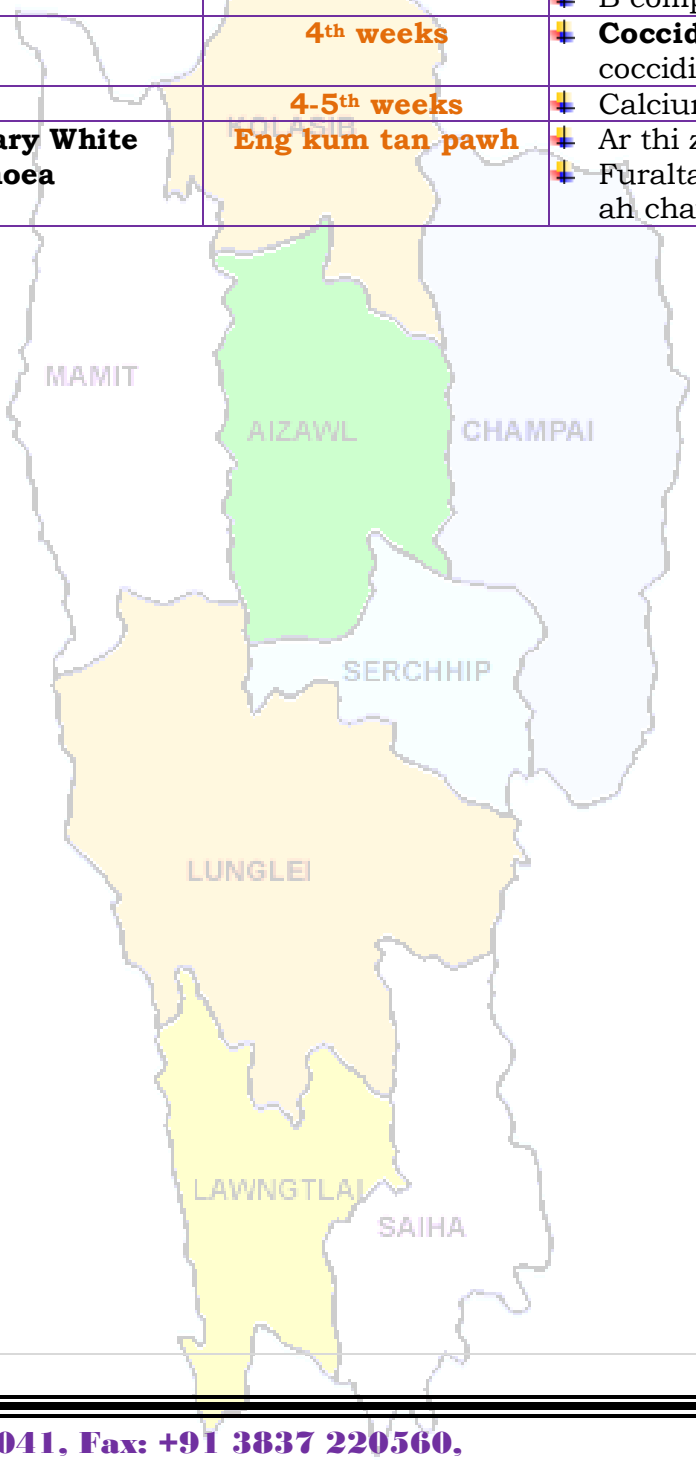
			nia an puitlin hunah R_2B pek leh tur a ni. B complex leh antibodies
		4th weeks	**Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	Eng kum tan pawh	Ar thi zawng zawng hal ral vak tur Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman 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: Mamit **Period: 26 November – 30 November, 2016**

Bulletin No: - 656/2016/ Bulletin/English **Date of issue: 25th November, 2016**

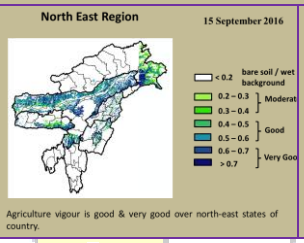
Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	30	30	29	28	27
Min Temp (ºC)	15	15	14	13	12
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	43	42	41	42	43
Wind Speed (KmpH)	2	2	2	2	2
***Wind Direction**	E	E	E	E	E

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

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

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

Weather summary of the past three days	Weather forecast valid from 26th November, 2016 To 30th November, 2016.
Maximum Tem. (ºC):23-25ºC **Minimum Tem. (ºC):** 10-12ºC **Maximum RH (%):**82-90% **Minimum RH (%):**41-48% **Wind Direction:** Southeasterly **Cloud cover:** Mainly cloudy **Wind speed:** 2 km/hr **Rainfall:** 00.0 mm	There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 27-30ºC and 12-15ºC. Maximum relative humidity is expected in the range of 100% and minimum may from 41-43%. Wind direction would be easterly with the wind speed of 2 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:*** **00.0 mm**

NDVI for Mizoram		
	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		↓ Orange is picked when colour turn to dark green to pale yellow. ↓ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ↓ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ↓ Limes and lemons take 150-160 days for maturity. ↓ There may be 2 or 3 crops in a year in limes and lemons. ↓ The cold storage conditions for long term storage for different citrus fruits are available. ↓ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
		Fruit fly	↓ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Banana	**Harvesting stage**		↓ Change of colour from green to yellowish. ↓ Fingers are about three quarters full i.e.3/4 of fruit is rounded ↓ Ridges should still be prominent on the remaining quarter of the finger. ↓ Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). ↓ Too early (when the bananas are thin and dark green). ↓ Too late (when they are thick and turning yellow).
		Banana Rhizome weevil	↓ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching

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			stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✦ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
		Banana beetle	✦ Removal of weeds from basin ✦ Removal of unwanted sucker ✦ Application of alphamethrin @ 0.01%.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8 months after planting. ✦ One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. ✦ After this, irrigation has to be withheld to hasten maturity. ✦ Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.

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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.
Early Cole crop	**Vegetative stage**		✚ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✚ To produce compact head, the plant should be earthing up 4-5 weeks after transplanting. ✚ Water should be applied at every week interval. ✚ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		N deficiency	✚ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✚ Apply 2% urea solution when this symptom will occur.
		P deficiency	✚ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✚ Apply 4% DAP solution when this symptom will occur.
Onion	**Nursery stage**	**Poly house**	✚ 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)
			✚ 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

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			at 10-15 DAS are effective.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown. ✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Carrot and radish			✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season. ✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at

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rice fellow			physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. - Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. - A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Zero tillage toria cultivation in rice fellow	**Sowing stage**		- After harvesting of rice, toria under no-till system. - The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the toria crops. - Toria crop will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. - A recommended dose of 50 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of toria seeds. Half dose of nitrogen fertilizer along with full dose of phosphorus and potash will apply at the time of sowing. - Seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Soybean	**Vegetative stage**	**Zero tillage**	- Clear base of the plant. - Earthing up soil near to plant for better support.
Green gram, black gram and French bean (After Pre kharif rice harvest)	**Vegetative stage**	**Zero tillage**	- Clear base of the plant. - Earthing up soil near to plant for better support. - For French bean use bamboo for staking or support. - Use split dose of fertilizer for better fruiting for French bean.

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Pig	**All stages**	**Swine flu**	✚ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✚ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed

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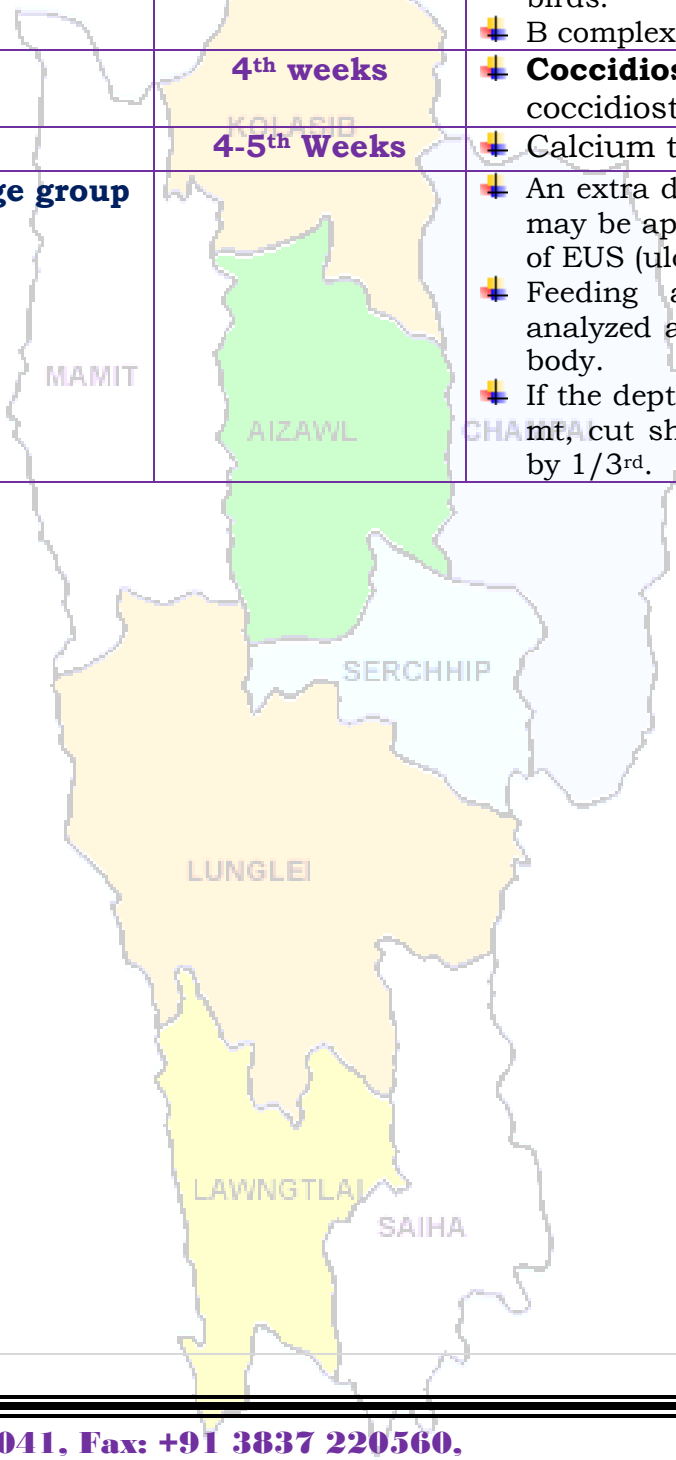
	Preventive measures	**0-3 rd week**	**Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. B complex with antibodies
		4th weeks	**Coccidiosis-** Amprolium or coccidiostat
		4-5th Weeks	Calcium tonic fortified with B_{12}
Fish	**All age group**		An extra dose of Lime @ 200 kg per ha may be applied to prevent the outbreak of EUS (ulcer disease). Feeding and fertilizer need to be analyzed as per the depth of the water body. If the depth of water body drop below 1 mt, cut short the feeding and fertilizer by 1/3rd.



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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:** 26 November – 30 November, 2016

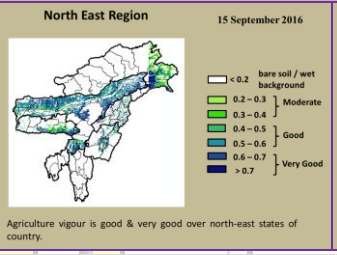
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	30	30	29	28	27
Min Temp (oC)	15	15	14	13	12
Cloud Coverage	Clear sky	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	43	42	41	42	43
Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC):23-25oC **Minimum Tem. (oC):** 10-12oC **Maximum RH (%):**82-90% **Minimum RH (%):**41-48% **Wind Direction:** Southeasterly **Cloud cover:** Mainly cloudy **Wind speed:** 2 km/hr **Rainfall:** 00.0 mm	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 27-30oC a ni ang a. A vawh lai ber in 12-15oC ni tura beisei a ni. RH san lai berin 100% leh a hniam lai berin 41-43% ni tur a rin niin. Thli hi darkar khatah 2 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
*/NDVI for Mizoram	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Tomato	**A chi kui hun**	**A chi kuitiahna hmun tur siam dan**	✚ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✚ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✚ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✚ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar hlat zawng hi 7-10 cm tur a ni.
		Nursery natna (Damping off)	✚ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp) @ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a

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			veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✦ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✦ A rawng chu a hring atangin gold rawngah a inthlak ang. ✦ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✦ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✦ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✦ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✦ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✦ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✦ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni. ✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.

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		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Bekang	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut thin tur.
Green gram, black gram leh French bean (nipui buh seng zawh hunah)	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut rih vur thin tur. ✦ French bean tan bik athlawp tu atan mau hman tur. ✦ A rah athat lehzual nan French bean tan bik chuan mumal takin a in henin leitha pek tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-

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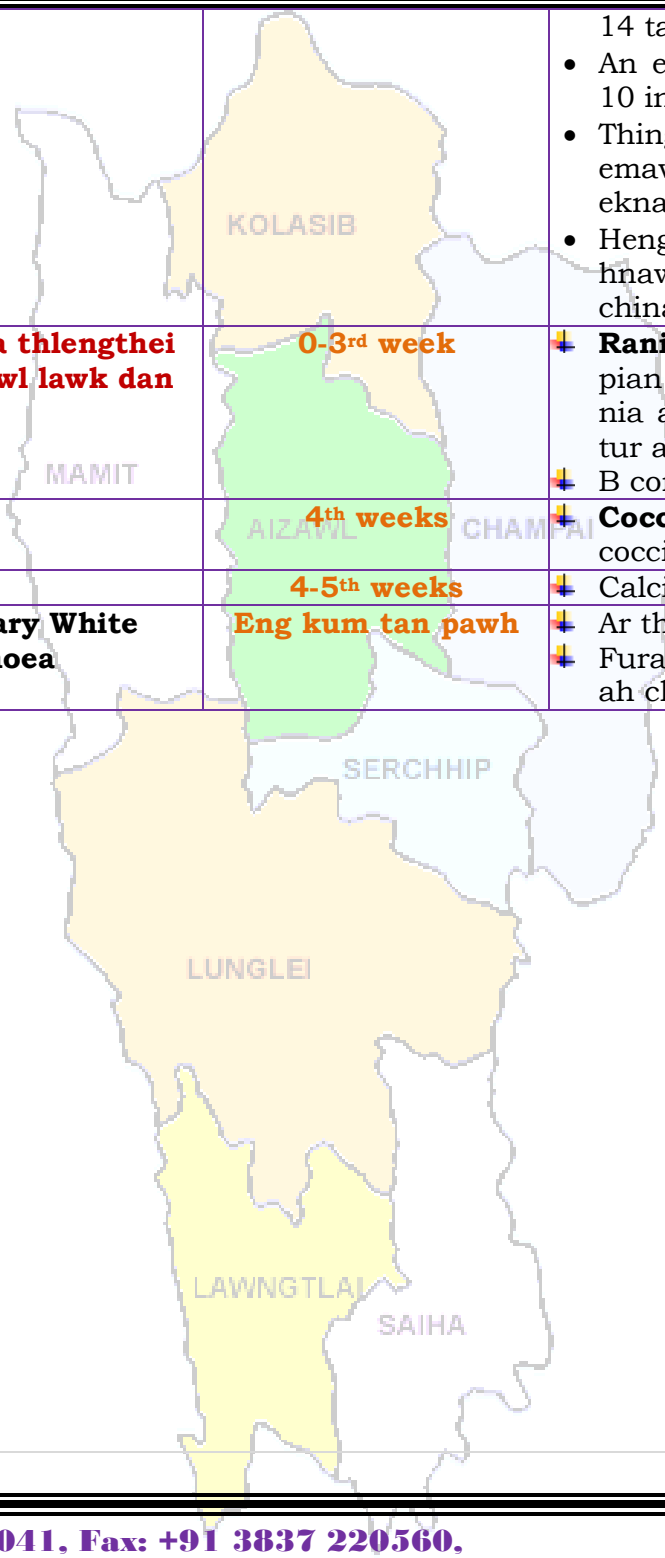
			14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni. ✦ B complex leh antibodies
		4th weeks	✦ **Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	✦ Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	**Eng kum tan pawh**	✦ Ar thi zawng zawng hal ral vak tur ✦ Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman 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: Saiha **Period:** 26 November – 30 November, 2016

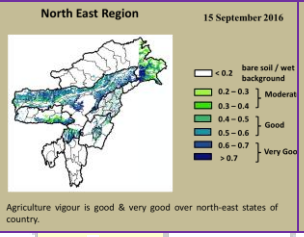
Bulletin No: - 656/2016/ Bulletin/English **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	28	28	28	27	26
Min Temp (ºC)	12	10	9	9	9
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	97	96	96	97	97
Min RH (%)	42	33	29	35	34
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	E	E	E	E

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

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

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

Weather summary of the past three days	Weather forecast valid from 26th November, 2016 To 30th November, 2016.
Maximum Tem. (ºC): 20-21ºC **Minimum Tem. (ºC): 8-11ºC** **Maximum RH (%):80-85%** **Minimum RH (%):35-48%** **Wind Direction: Southeasterly** **Cloud cover: Mainly cloudy** **Wind Speed: 2km/hr** **Rainfall: 00.0 mm**	There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 26-28ºC and 9-12ºC. Maximum relative humidity is expected in the range of 96-97% and minimum may from 29-42%. Wind direction would be Easterly with the wind speed of 4 km per hour. Clear sky will prevail during the next five days. ***Weekly cumulative rainfall:* 00.0 mm**
NDVI for Mizoram	 Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8

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			months after planting. - One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. - After this, irrigation has to be withheld to hasten maturity. - Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.
Tomato	**Flowering to fruit formation stage**		- Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. - Drain out excess moisture/water from the base of the plant. - Staking is very important to support the plants to get more yields and quality should be done after one month of planting. - Mulching with black polythene film reduces weed growth, increase crop growth, early bearing and total yield.
		Bacterial wilt	- Uproot all infected plant and burn it. - This disease can be minimized by practicing crop rotation. - Soil dranching with Bordeaux mixture (1:1:100) after one month of planting is effective method to manage this disease.
		Fruit fly	- In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Early Cole crop	**Card formation stage**		- Light irrigation on every alternate day may be given for better establishment and smooth growth. - Mulching must be done after irrigation.

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			✦ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		Cutworm	✦ Prevailing weather is conducive for the attack of cut worm which hide during day time in cracks of the soil and become active at dusk, feed on leave and cut the tender stem. ✦ Apply cypermethrin or carbaryl 2 ml/lt of water or Tricel 1 ml/lt of water in evening every 10 days interval.
		N deficiency	✦ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✦ Apply 2% urea solution when this symptom will occur.
		P deficiency	✦ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✦ Apply 4% DAP solution when this symptom will occur.
Capsicum	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Carrot and radish	**Sowing stage**		✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season.

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			✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Potato	**Sowing**		✦ Prepare the land for potato cultivation without any further delay. ✦ This may help to avoid some bacterial infection at growing stage. ✦ Land may be ploughed thoroughly for proper tillage. ✦ If land is prepared good quality of seeds may be collected for planting. ✦ Cultivation from TPS is also found profitable. ✦ Seed must be treated before sowing.
Onion	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Brussels sprout	**Nursery stage**		✦ 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)
			✦ 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.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown.

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			✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance. ✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of

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			the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter (BQ)**	• Black Quarter Vaccine (BQV). ❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	✚ **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ **Coccidiosis-** Amprolium or coccidiostat

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Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Saiha **Period:** 26 November – 30 November, 2016

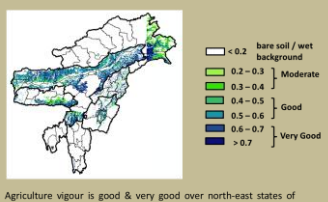
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	28	28	28	27	26
Min Temp (oC)	12	10	9	9	9
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	97	96	96	97	97
Min RH (%)	42	33	29	35	34
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC): 20-21oC **Minimum Tem. (oC):** 8-11oC **Maximum RH (%):**80-85% **Minimum RH (%):**35-48% **Wind Direction:** Southeasterly **Cloud cover:** Mainly cloudy **Wind Speed:** 2km/hr **Rainfall:** 00.0 mm	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 26-28oC a ni ang a. A vawh lai ber in 9-12oC ni tura beisei a ni. RH san lai berin 96-97% leh a hniam lai berin 29-42% ni tur a rin niin. Thli hi darkar khatah 4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
NDVI for Mizoram	 Agriculture vigour is good & very good over north-east states of country.
	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Baibing (Local vegetable)	**A seng hun**		✚ A kung bulah hnim a to tur a ni lo. ✚ A rah hmin ho chu seng vek tur. ✚ A kum leh atan a chi dah tur.
Tomato	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin tur. ✚ Phun anih hnu ni 30-45 hnu ah lei chawhphut a rihvur tur. ✚ A kung dawm tu tur in pal ban phun zel ni se, chu chuan a rah that leh a thar tam kawngah apui in a tangkai hle a ni. ✚ Thlai bul tih hnawm nan a polythene dum hman hian hnim to tur a veng a, thlai a thang chak a, a par hma tir a, a thar tam phah tir bawk a ni.
		Bacterial Wilt	✚ Natna vei te chu a zung chawp a pawh phawi a hal ral vek tur. ✚ Thlai chin dan thlakkual (crop rotation) hmangin he natna hi a tih ziaawm theih a ni. ✚ Phun atanga thla khat hnu ah Bordeaux mixture (1:1:100) hmanga lei tih hnawn hi he natna enkawl nan hian a tangkai in a sawt em em a ni.
Early cole crop	**Par a chhuah hma**		✚ Leichhung a boruak a luh that a zung alo that zawk theihnan hnim to pawhfai leh lei chawhphut thin

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			tur. - Bawr tha tak thar chhuah theih nan phunsawn a nih hnu atanga kar 4-5 thleng a bul chawhphut a lei tih thawl tur a ni. - Kar khat dan zel ah tui pek tur a ni. - A bawr (head) a keh chhiatloh nan a puitlin hun lai velin tui pek tamloh hram tur.
		N tlakchhamna	- He tlakchhamna hi neem cake @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 2 per cent urea hman tur.
		P tlakchhamna	- He tlakchhamna hi phosphorus based fertilizer @0.4kg/m^2 hmangin a enkawl dam theih a ni. - He natna hi a lo lan chuan 4 per cent DAP hman tur.
Capsicum	**A chi kui hun**	**Poly house**	- Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. - A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. - FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. - A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			- A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. - A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.

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Purunsen	**A chi kui hun**	**Poly house**	✦ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✦ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✦ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✦ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar
			✦ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni. ✦ A chi theh atanga ni 10-15 hnu ah tui litre khat ah 1% Bordeaux mixture emaw 2 g captan emaw 3 copper oxychloride emaw siam a a kuina hmun phuh hnawn tur.
French Bean	**A chi theh hun**		✦ A chi danglam leh hrisel, chang tha leh thianghlim chiah theh tur. ✦ Thing ngul hmang chi tan a chi theh inkar tur chu 60cm x 60 cm a ni. ✦ A chi theh hma in a chi chu hectare khat ah Rhizobium vermicompost 10t hmang a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✦ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✦ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp)

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			@ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	✚ Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		✚ A rawng chu a hring atangin gold rawngah a inthlak ang. ✚ Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. ✚ A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	✚ Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. ✚ Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. ✚ Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	✚ Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua ✚ Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni.

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			✦ Lekhachhaih hi sava hlauh atan hman thin a ni bawk.
		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a

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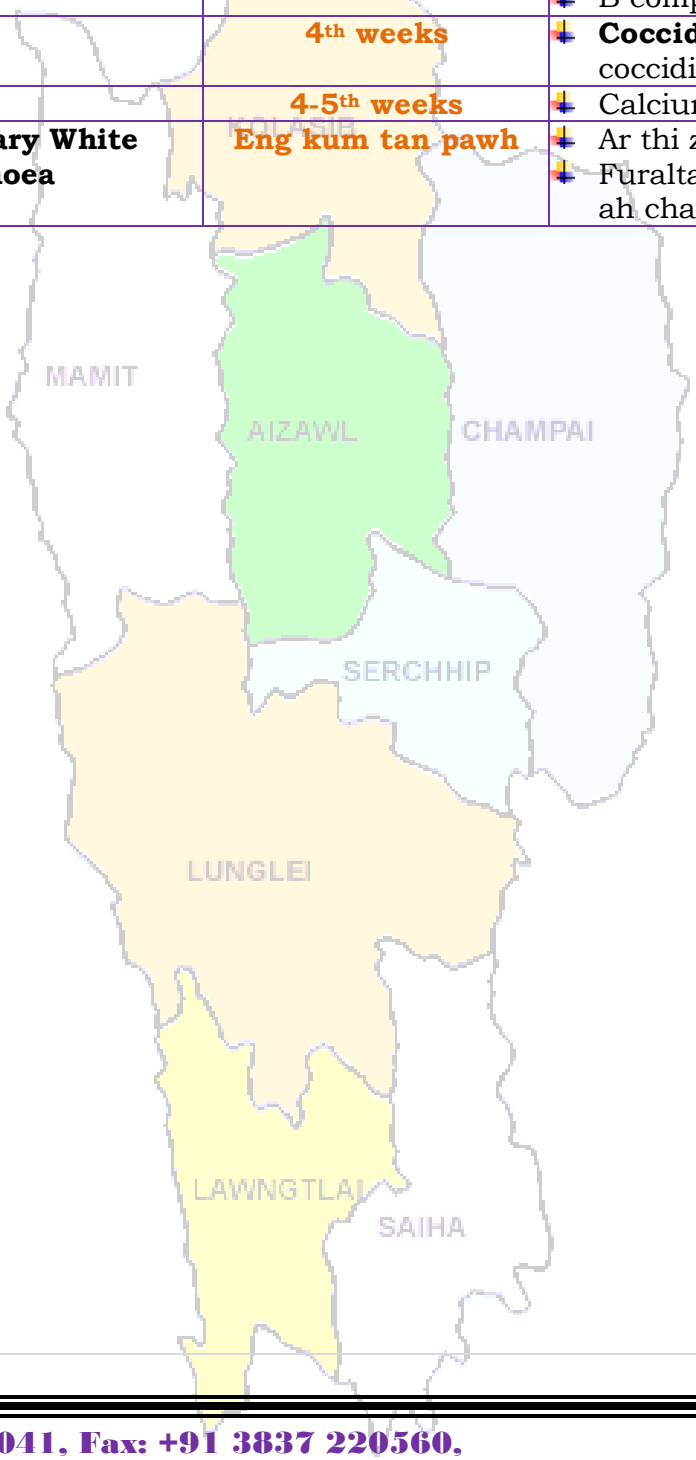
			nia an puitlin hunah R_2B pek leh tur a ni. B complex leh antibodies
		4th weeks	**Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	Eng kum tan pawh	Ar thi zawng zawng hal ral vak tur Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman tur.



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GRAMIN KRISHI MAUSAM SEWA

ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Serchhip **Period:** 26 November – 30 November, 2016

Bulletin No: - 656/2016/ Bulletin/English **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (ºC)	29	29	29	28	28
Min Temp (ºC)	15	14	14	13	12
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	36	32	26	30	30
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	E	E	E	E

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

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

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

Weather summary of the past three days

Maximum Tem. (ºC):21-24ºC
Minimum Tem. (ºC): 7-12ºC
Maximum RH (%):78-89%
Minimum RH (%):27-43%
Wind Direction: Easterly
Cloud cover: Clear Sky
Wind speed: 2 km/hr

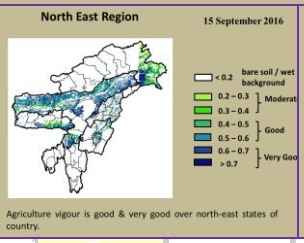
Rainfall: 00.0 mm

Weather forecast valid from 26th November, 2016 To 30th November, 2016.

There is no chance of rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 28-29ºC and 12-15ºC. Maximum relative humidity is expected in the range of 100% and minimum may from 26-36%. Wind direction would be easterly with the wind speed of 4 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: **00.0 mm**

NDVI for Mizoram



Moderately wet mildly dry/mildly wet conditions

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Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	**Harvesting stage**		✦ Orange is picked when colour turn to dark green to pale yellow. ✦ Mandarins and sweet oranges normally take 240-280 days to arrive at maturity. ✦ Mature fruits at colour break stage are picked up in 2 - 3 intervals of 10-15 days. ✦ Limes and lemons take 150-160 days for maturity. ✦ There may be 2 or 3 crops in a year in limes and lemons. ✦ The cold storage conditions for long term storage for different citrus fruits are available. ✦ Oranges may be packed in well ventilated CFB boxes - 30 cm x 30 cm x 30 cm.
		Fruit fly	✦ In large gardens apply carbaryl 0.2 per cent or malathion 0.15 per cent suspension containing sugar or jeggery at 10 g/l at fortnightly intervals at flowering and fruit initiation.
Banana	**Harvesting stage**		✦ Change of colour from green to yellowish. ✦ Fingers are about three quarters full i.e.3/4 of fruit is rounded ✦ Ridges should still be prominent on the remaining quarter of the finger. ✦ Harvest bananas when they are swollen and green but before they become ripe (plump and yellow). ✦ Too early (when the bananas are thin and dark green). ✦ Too late (when they are thick and turning yellow).
		Banana Rhizome weevil	✦ Apply insecticide like imidacloprid 0.5 ml or phosolone 1.5 ml or acephate 1.0 g or dimethoate 2 ml /l at 50% egg hatching

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			stage when 1st instars predominate which coincides with I Fortnight of July.
		Banana panama wilt	✦ Use disease free planting material. Roughing of infected plant and destroy them. Removing of excess male buds prevent disease spread. Disinfect the farm equipments.
		Banana beetle	✦ Removal of weeds from basin ✦ Removal of unwanted sucker ✦ Application of alphamethrin @ 0.01%.
Oil plam	**Harvesting stage**		✦ Harvest only ripe fruit bunches and collect all loose fruit using high quality harvesting equipment. ✦ The oilplam will be ready for harvest ready for harvesting in 2.5 to 3 years after the plantation in the main field. ✦ Harvesting can be done when the fruit on plam turns into yellowish to orange colour. ✦ While harvesting a stalk length of 5 cm alone should be left. Harvesting should be done at 10-12 days interval. ✦ In young plantations, we get more bunches with less bunch weight and in adult plantations the bunch weight is more but the bunch number is less.
Colocasia	**Harvesting stage**		✦ Leaves have started turning yellow and some of them have fallen off, signaling the time for harvesting the corms. ✦ Crop will be ready for harvest in 6-8 months after planting. ✦ One month prior to harvest, all the suckers may be wrapped around the base of the mother plant and covered with soil by earthing up, for arresting further vegetative growth and sprouting of tubers. ✦ After this, irrigation has to be withheld to hasten maturity. ✦ Harvesting is done by carefully uprooting the plants and the mother corms and cormels are separated.

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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.
Early Cole crop	**Vegetative stage**		✚ Light hoeing and hand weeding is required to remove weeds and loosen the soil for better aeration and root development. ✚ To produce compact head, the plant should be earthing up 4-5 weeks after transplanting. ✚ Water should be applied at every week interval. ✚ Heavy irrigation is avoided at the time of maturity of head to avoid cracking.
		N deficiency	✚ Deficiency is managed with the application of neem cake @0.4kg/m^2. ✚ Apply 2% urea solution when this symptom will occur.
		P deficiency	✚ Deficiency is managed with the application of phosphorus based fertilizer @ 0.4kg/m^2. ✚ Apply 4% DAP solution when this symptom will occur.
Onion	**Nursery stage**	**Poly house**	✚ 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)
			✚ 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

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			at 10-15 DAS are effective.
French bean	**Sowing stage**		✦ Variable, healthy, well mature and pure seeds should be sown. ✦ Optimum spacing for pole type 60 cm X 30 cm. ✦ Before sowing seed should be treated with Rhizobium vermicompost@10 t/ha.
Capsicum	**Nursery stage**	**Poly house**	✦ 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)
			✦ 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.
Carrot and radish			✦ Carrots and radish are sown in raised beds having dimension of 1 metre breadth, any convenient length and raised from 15 to 30 cms. ✦ In order to have an evenly sown crop the seeds are mixed with dry/ loose soil. ✦ In this method the seeds are sown in lines with the help of a marker at a distance of 6 cms apart. ✦ The seeds are then covered with loose and friable soil of about 2-4 cms again depending upon the rainfall and season. ✦ 90: 250: 130 Kg NPK will apply throughout the cropping season where whole quantity of Single Super Phosphate, Muriate of Potash and half the quantity of Urea is to be given as basal dose at the time of final preparation of the land.
Ginger and turmeric	**Maturity stage**		✦ Field must be inspected daily for disease appearance.

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			✦ While inspecting, the healthy plants/plots must be marked and kept for planting in the next season. ✦ Marking has to be done properly otherwise when plant matures and gets dried up, it will be very difficult to find out the marked plots.
Zero tillage pea and lentil cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, pea and lentil will sow under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the rabi crops pea and lentil. ✦ Pea and lentil will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 30 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of lentil seeds and covered the seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Zero tillage toria cultivation in rice fellow	**Sowing stage**		✦ After harvesting of rice, toria under no-till system. ✦ The rice fields will drain at physiological maturity (one week before harvesting) to get a suitable soil condition to cultivate the toria crops. ✦ Toria crop will sow by opening a narrow furrow in between two rows of rice using a manual furrow opener. ✦ A recommended dose of 50 kg N, 60 kg $P_2O_5$and 40 kg K_2O/ha will apply in furrows before sowing of toria seeds. Half dose of nitrogen fertilizer along with full dose of phosphorus and potash will apply at the time of sowing. ✦ Seed with soil and FYM mixture (2:1 ratio) to give a good seed-soil contact.
Soybean	**Vegetative**	**Zero tillage**	✦ Clear base of the plant.

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	stage		✦ Earthing up soil near to plant for better support.
Green gram, black gram and French bean (After Pre kharif rice harvest)	**Vegetative stage**	**Zero tillage**	✦ Clear base of the plant. ✦ Earthing up soil near to plant for better support. ✦ For French bean use bamboo for staking or support. ✦ Use split dose of fertilizer for better fruiting for French bean.
Pig	**All stages**	**Swine flu**	✦ Swine flu may occur in pig at all stages. It is a viral flu and highly contagious. Clinical signs include high fever, skin lesions, convulsions, constipation followed by diarrhea and vomiting, less appetite. ✦ In pregnant animals abortion or still birth or weak litters may also happen. Once the symptoms is noticed, immediately informed the nearby veterinary Doctor. Maintain hygiene of the shed with application of Potassium Per Manganite (1-2 gm per in 15 litter of water) and lime both inside and outside of
		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**		• Due to prolong dry spell there is a shortage of green grass in the field. For balanced diet and nutrition to your cattle, provide urea molasses treated paddy straw.
	All age group	**Foot and Mouth Disease (FMD)**	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	**Black Quarter**	• Black Quarter Vaccine (BQV).

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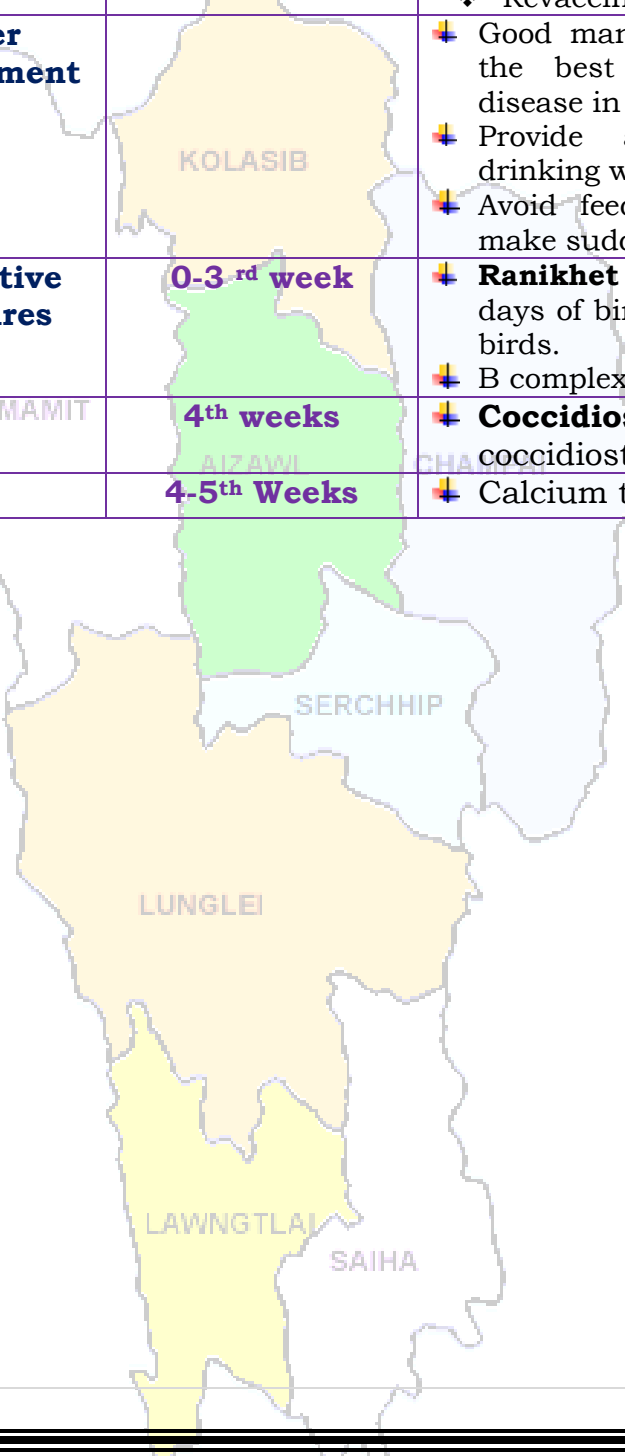
		(BQ)	❖ Primary vaccination 6 month or above ❖ Revaccination annually
Poultry	**Litter management**		✚ Good management and sanitation are the best ways to avoid infectious disease in poultry. ✚ Provide ample quantity of clean drinking water. ✚ Avoid feeding of mouldy feed. Don't make sudden changes in feed
	Preventive measures	**0-3 rd week**	✚ **Ranikhet Disease-** F1 vaccine at (1-6) days of birth and R_2B vaccine for adult birds. ✚ B complex with antibodies
		4th weeks	✚ **Coccidiosis-** Amprolium or coccidiostat
		4-5th Weeks	✚ Calcium tonic fortified with B_{12}



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GRAMIN KRISHI MAUSAM SEWA

ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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

District: Serchhip **Period:** 26 November – 30 November, 2016

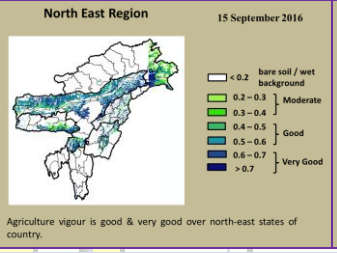
Bulletin No: - 656/2016/ Bulletin/Mizo **Date of issue:** 25th November, 2016

Parameters	26.11.2016	27.11.2016	28.11.2016	29.11.2016	30.11.2016
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	29	29	29	28	28
Min Temp (oC)	15	14	14	13	12
Cloud Coverage	Clear sky	Mainly clear	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	100
Min RH (%)	36	32	26	30	30
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	E	E	E	E

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

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

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

Ni thum kalta sik leh sa dinhmun tlangpui	26th November– 30th November, 2016 chhunga sik leh sa dinhmun tur tlangpui
Maximum Tem. (oC):21-24oC **Minimum Tem. (oC): 7-12oC** **Maximum RH (%):78-89%** **Minimum RH (%):27-43%** **Wind Direction: Easterly** **Cloud cover: Clear Sky** **Wind speed: 2 km/hr** **Rainfall: 00.0 mm**	Tun ni 5 chhung lo awm turah hian ruahtui tla miahlo tura beisei a ni. Khua a lum lai berin 28-29oC a ni ang a. A vawh lai ber in 12-15oC ni tura beisei a ni. RH san lai berin 100% leh a hniam lai berin 26-36% ni tur a rin niin. Thli hi darkar khatah 4 km vela chakin chhaklam awi zawngin a tleh rin a ni. A tlangpuiin tun ni nga chhung hian khawthiang tak hmuh beisei a ni. ***Weekly cumulative rainfall:*** **00.0mm**
***/NDVI for Mizoram**	 Agriculture vigour is good & very good over north-east states of country.	Moderately wet mildly dry/mildly wet conditions

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Thlai/ ran /sangha	Spat zawng	Hmalakna tur/ rannung leh natna hrik awm thei te	Agricultural/Horticultural/ animal husbandry atana thurawn
Khasi Mandarin leh acid lime	**Seng (Harvesting) hun**		✦ Serthlum rah chu a hringduk atanga rawng eng dala arawn inthlak hunah lawh tur a ni. ✦ Mandarins leh sweet oranges te hian an puitlin nan ni 240-280 vel an mamawh. ✦ A rah puitling tawhin a hmin rawng a rawn chhuah tan hunah lawh tur a ni a, ni 10-15 inkar danah vawi 2- 3 lawh tur a ni ✦ Limes leh lemons hian puitlin nan ni 150-160 an mamawh. ✦ Limes leh lemons te hi kum khatah vawi 2 emaw vawi 3 emaw an rah thei. ✦ Rei tak dahthat theihna tur vur bawm (cold storage)changtlung tak ser rah chi hrang hrang tan a awm hrang vek bawk a ni. ✦ Ser rah te chu boruak thianghlim luh theihna tur bawm (CFB Box) 30 cm x 30cm x 30 cm azau ah pack fel tur a ni.
		Ser rah bawmtu rannung thlawkthei (Fruitfly)	✦ Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Sapthei	**Seng (Harvesting) hun**		✦ A kung phun a nih atanga thla sawm hnu ah rah a pe chhuak tan a, chuan thla 16-18 a nih thlengin a rah chhunzawm ta thin a ni. ✦ Rah hun bik hi tum hnih (2) a nei a chu chu August –

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			December leh March- May ah te an ni. • A rah hmin nan ni 80-85 vel a mamawh thin. • A rah rawn senduk (purple) toh chu a kuang tlem a zawng nen lawh tel tur a ni. • A rah seng tawh ho chu a pian hmang leh rihna te a tlakhniam hma in a rang lam a hralh zawh vat tur a ni. • A ro hnu in a kor te chu zur angin lang mahse a chhung lam erawh ni engemaw chen chu ala tha vek thung ang.
		Sapthei rah bawmtu rannung thlawkthei (Fruitfly)	• A kung a natna nei te chu lakkhawm a hal ral vek tur. • Huan zau deuh nei te tan carbaryl 0.2 per cent emaw Malathion 0.15 per cent ah Jeggery 10 gram tui litre 1 a siam chu pawlh tur a ni a, chu mi chu a par lai leh rah a chhuah tirhin kar 2 danah zel spray tur a ni.
Balhla	**Seng (Harvesting) hun**		• A hring atanga a eng a a inthlak hunah . • A thlar a balhla ho hmun li a then a hmun thum an pum that a a bak zawngin kil anla neih lain. • Balhla hi anla puam a an hrin that lai mahse an hmin hma si in. • Balhla te an sin lai leh rawng hring duk anla nih lai chuan sengloh tur a ni. • Rawng eng an nih tawh chuan seng nan a tlai tawh tihna a ni.
		Balhla zung eichhetu rannung (Banana Rhizome	• Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu

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		weevil)	tui chu rannung tui 50 per cent a keu hun velah kah tur a ni (July kar hmasa ber a ni tlangpui).
		Banana panama wilt	✦ Natna kai lo chauh phun tur. Natna kai ho chu a zung nen kara paih tur. Farm-a hmanraw hrang hrangte natna hrik kai lo tura tihfai thin bawk tur a ni.
		Banana beetle	✦ A bul vela hnim to tihfai tur ✦ A no rawn chawr thar mamawh loh te paih tur ✦ Alphamethrin 0.01 per cent hman tur
Oil palm	**A rah insiam tan hunlai**		✦ A nu leh pa par hma lutuk te thenfai tur ✦ Heihian a kung a ti thag tha in zung a kaih ngheh tir bik thin a ni. Phun atanga thla 14-18 velah an par tlangpui ✦ A par nu leh pa hi a kung in vui a rawn chhuah tan tirh ah pawh phawi vat tur anni. ✦ Kut in emaw a pawhphawina hmanrua DOPR in ansiam hmangin awlsam takin a tih theih a ni. ✦ Hetianga a par nu leh pa lak hi kum hnih leh chanve atanga kum thum annih vel thlengin a tih zawm theih a ni.
			✦ Thli leh rannung ten inthlahchhawnna kawngah an pui thin a, amaherawhchu thli hmanga inthlahchhawnna erawh hichuan a thawh hlawklo. ✦ Inthlahchhawn nan a rannung tangkai tak *Elaeidobius kamerunicus* hian a inthlahchhawnna ah leh a rah tur insiam kawngah a pui nasa hle a ni. ✦ Phun anih atanga kum hnih leh chanve hnu ah he rannung hi chhuah a tha a, kum thum hnu

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			a a kung in a that puiloh anih chuan he rannung hi chhuah vek tur a ni.
Colocasia	**A seng hun**		✚ A hnah te a eng (yellow) tan in a then an tla tan bawk a, chu chuan seng a hun a ni tih a lan tir. ✚ Phun atanga thla 6-8 liam hnu ah seng theih a ni. ✚ Seng dawnin uluk takin a zung nen phawi chhuah vek tur a ni. ✚ Bal chu lahrangin ni hlimah pho hul tur a ni.
Tomato	**A chi kui hun**	**A chi kuitiahna hmun tur siam dan**	✚ Huan zawlah a chi thehna tur lei rihvum tur, ni hmuh thatna hmun ni bawk se. ✚ A hmun chu a vang zawng metre khat a zau tur a ni a, a sei zawng chu mahni huan remchan ang tawk a siam mai tur a ni. ✚ FYM hi metre square khatah kg 1.5 – 2.0 hman tur a ni. ✚ A chi hi awmze nei taka ngil taka theh tur a ni a, an inkar hlat zawng hi 7-10 cm tur a ni.
		Nursery natna (Damping off)	✚ A chi hi kg 1 ah thiram gram 3 emaw Trichoderma viride gram 4 leh metalaxyl gram 4 chawhpawlh a enkawl tur a ni.
Sawhthing leh Aieng	**Par a chhuah hma**		✚ Thlai hnah, a tang ro leh hnim te chu paihfai vek tur. ✚ Lin tirh (a to chhuah hma) in Atrazine (Atratraf 50wp, Gesaprim 500fw) 1.0-1.5kg a.i tui litre 600 ah pawlh tur a ni. Alachlor (Lasso) @2.25kga.i ha^{-1} Metolachlor (Dual) @1.5-2.0 kg a.i ha^{-1}, Pendimethalin (Stomp) @ 1-1.5kg a.i ha^{-1} te hian hnimhnah lian lampang chi a

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			veng a ni.
		Turmeric shoot borer (Aieng kung ei chhetu rannung)	Rannung hlo imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1.0g emaw dimethoate 2ml emaw tui litre khatah pawlh a, hman tur a ni.
Kharif rice	**A puitling hun/a vui insiam tan hun**		A rawng chu a hring atangin gold rawngah a inthlak ang. Tui tling luan chhuahna tur mumal tak a sir kil khatah siam tur. A vui hmasa te tana harsatna awmlo tur in tui tling te chu paih chhuah vek tur.
		Sazu tihchhiat	Sazu chhenna hmun tihchhiat leh fai taka buh hmun enkawl zir. Buh hmun leh achheh vel a awmhmun an khuar theihna tur atana hmanraw remchang hnimhnah leh thlai ningnawi emaw buh bangnawi awmthei hrim hrim chu thenfai vek tur. Sazu in a a tihchhiat nasatna hmun ah chuan sazu hrai na tur 2 per cent Zinc phosphide (96 parts of broken rice + 2 parts of edible oil + 2 parts of 98% ZnP) hman tur a ni. ZNP tur (poison) hman hma in a thlem dan tur zir a enchhin hmasak phot tur a ni.
		Sava tihchhiat	Meithal chi hrim hrim eng pek chhuah pah a bengchheng siam thei hmanrua Balloon hampuar buh kunga tawnbeh hi sava hnawhbo nan senso hautaklo si a hman thin a ni. Lekhachhaih hi sava hlauh atan hman thin a ni bawk.

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		Rice yellow stem borer	✦ A hnah hmawr tan tur. ✦ A kung hrisel lo lai paih tur ✦ Tui litre khatah rannung hlo Imidacloprid 0.5ml emaw phosolone 1.5ml emaw acephate 1g emaw dimethoate 2ml emaw pawlh a, chu tui chu kah tur.
Bekang	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut thin tur.
Green gram, black gram leh French bean (nipui buh seng zawh hunah)	**Par a chhuah hma**	**Zero tillage**	✦ A kung bul leh a vel thenfai ✦ A kung alo that a a zung in a thlawp that lehzual nan a kung bul chawhphut rih vur thin tur. ✦ French bean tan bik athlawp tu atan mau hman tur. ✦ A rah athat lehzual nan French bean tan bik chuan mumal takin a in henin leitha pek tur.
Vawk	**Kumtluanin**	**Vawk natna**	✦ Vawkin heng natna chi hrang hrang nguina, che tha theilo, ek tang emaw kawthalo ang chi an lan tir a nih chuan ran doctor pan a rawn vat tur.
		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	**Ar ek enkawl dan**		• Atui awpna in ah eng darkar 12-

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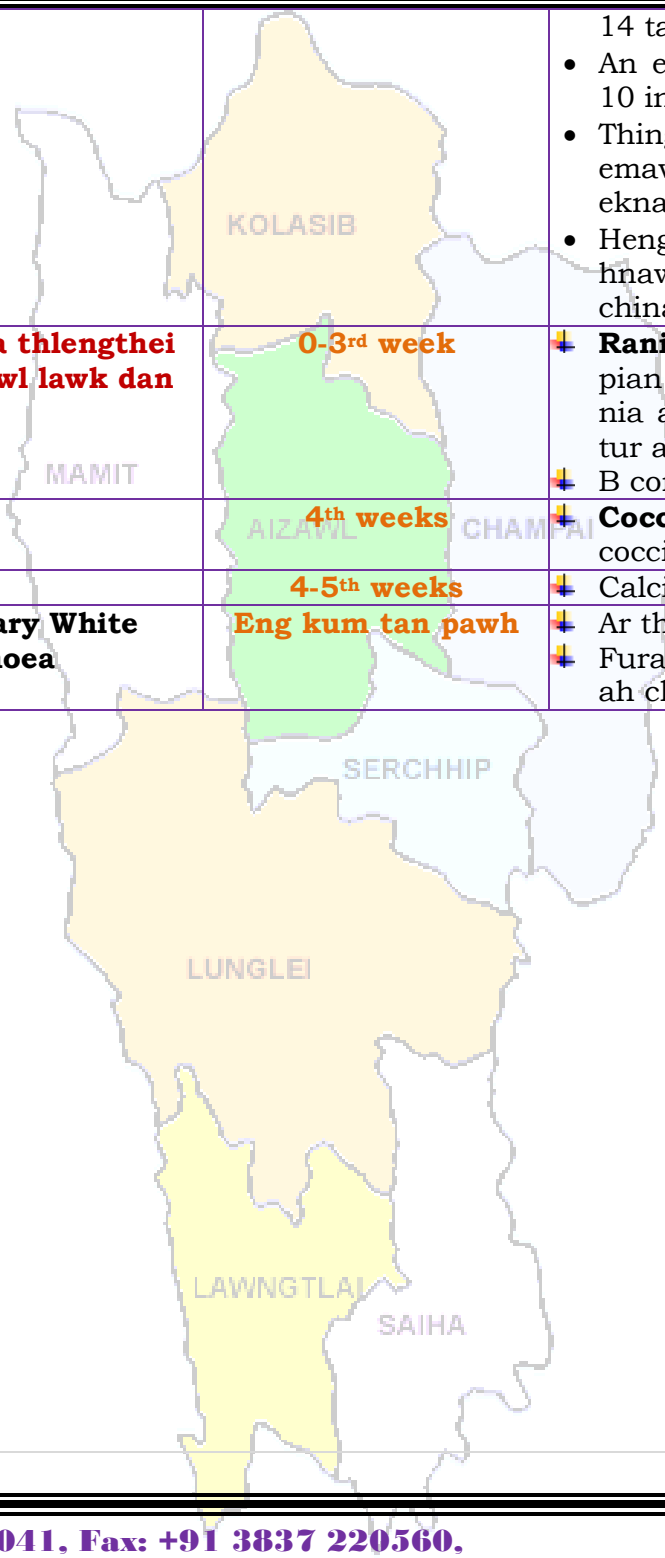
			14 tal a in chhi tur a ni. • An ekna tur hmun chu cm 7.5 – 10 inkar vel a chhah tur a ni. • Thingzei nawi emaw buhpawl emaw badam kawr emaw tehi an ekna tur atan a phah theih a ni. • Heng buhpawl, thingzei nawi te hi hnawng reng a vawn theih nan chinai phul tur a ni.
	Natna thlengthei enkawl lawk dan	**0-3rd week**	✦ **Ranikhet Disease**- Ar note an pian hlimin F_1 vaccine pek tur a nia an puitlin hunah R_2B pek leh tur a ni. ✦ B complex leh antibodies
		4th weeks	✦ **Coccidiosis**- Amprolium emaw coccidiostat pek tur.
		4-5th weeks	✦ Calcium tonic leh B_{12}
	Bacillary White Diarrhoea	**Eng kum tan pawh**	✦ Ar thi zawng zawng hal ral vak tur ✦ Furaltadone 0.5g chu tui litre khat ah chawhpawlh a hman tur.



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