

#### 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: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	0	6	6	12	9
Max Temp (oC)	30	32	35	35	34
Min Temp (oC)	21	22	23	23	23
Cloud Coverage	Partially clear	Mainly clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	97	96	96	97	95
Min RH (%)	69	61	50	59	67
Wind Speed (KmpH)	4	2	2	4	4
*Wind Direction	S-E	S-E	E	S-E	E

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

STATUS OF PREMONSOON- May 1-31, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm Champhai- 239.49mm Sai

Saiha- 109.52 mm Kolasib- 352.38mm (87.2mm) (380.9mm)

(341.8mm) (250.30mm) Lawngtlai-321.51mm Lunglei-344.00mm

Mamit-449.48mm

Serchhip-411.72mm

(285.5mm)

(186.21mm)

(442.80mm)

(25.9mm)

Weather summary of the past three days

Weather forecast valid from 24th June, 2015 To 28th June, 2015.

The temperature range for maximum and minimum were 31.5-33.8°C and 21.7-24.3°C respectively. Dense cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 87-94% & minimum of 54-66%. Rainfall recorded for the past three days is **85.70mm**.

There are chances of moderate to light rainfall during the next 4 day. The maximum and minimum temperatures for the next 5 days may range for 30-35°C and 21-23°C. Maximum relative humidity is expected in the range of 95-97% and minimum may from 50-67%. Wind direction would be southeasterly with the wind speed of 2-4 km per hour. Partially cloudy sky will prevail during the next five days.

#### Weekly cumulative rainfall: 33.0 mm

days is <b>85.70</b> 1	mm.		
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAI	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K <sub>2</sub> O/plant and 4 g of P <sub>2</sub> O <sub>5</sub> /plant.

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			+	12 g Nitrogen and Potash/plant is recommended for first and second
	<u> </u>			top dressing.
	7 )	3	-	Sucker and slips are usually preferred for planting.
	\ \	(	4	Potting mixture of soil, sand and
		KOLASIB		FYM or compost should be in
	\ \			proper ratio.
	/	" 3 4 )	+	For nursery only certified seed
	7			should be used.
	/		-	Stagnation of water in beds should be avoided.
	J		4	Seedling of uniform height should
	MAMIT	1		be selected for planting.
	ζ			Plant protection measures should
	1	AIZAWL CH	AMP)	be apuked.
Khasi	Vegetative	1 2	+	Spray (10 ppm) of Gibberellic acid
Mandarin and acid lime	stage	3 ~ (		should be done at colour break stage to delay colour development,
and acid nine	\ .	1 3 2	_	maintain firmness, extend
	{ (		1	harvesting period.
		SERCHHIP	/4	Fruit drops, which occur at least
	1	SERCHHIE		twice in each crop, should be
				controlled with the recommended
	)			doses of GA3, urea, benomyl and
		_	1	carbendazim at right time. Insect pests like Blackfly (Kolshi),
		LUNGLEI	7	Citrus Psylla, Leaf miner, Bark
	)	LUNGLEI		eating caterpillar, Fruit sucking
	1			Moth, Mites, Twing Blight,
	1	10		Gummosis, Root rot and Collar rot
				should be controlled.
			) 🔭	Recommended fungicide (Carbendazium) and proper doses
		( ( ) \ (		(0.1% or 1000 ppm) should be
		7	L	sprayed at proper time (One month
		LAWNGTLAL	1	and 15 days before harvest i.e. two
				sprays).
Oil plam	Vegetative/	SAIHA	1	Remove all dead plants and replace
	Harvesting stage		5.	with healthy seedling.
	Stage	2	-	Cleaning near base of the plant
		1 1		2   P a g e

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Banana	MAMIT Vegetative/	KOLASIB	and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/ harvesting	SERCHHIP	<ul> <li>Cleaning near base of the plant and cut unwanted branches.</li> <li>Application of split dose of fertilizer 600: 200:100 (g/pt).</li> <li>Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.</li> <li>Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease.</li> <li>Fruits are harvested when they attain full size, develop attractive yellow colour.</li> </ul>
		Comb weevil and stem weevil LAWNGTLAL SAIHA	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.
		17	3   P a g e

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			4	Application of over 100 g or neem oil was phytotoxic (harmful to
Dennie v Dunie	NT		-	plants) and uneconomical.
Passion Fruit	Nursery stage	3	-	When two to three leaves develop,
	1 \	x )		seedling should be transplanted in
		KOLASIB		polythene bags.
	- L	7		The seedlings are planted in field
		W. 1		when they become 3-4 months old.
	(	3 4 /	-	Mature 30-35 cm long stem with 3
	- {	(		nodes of pencil thickness should
	- /	7 5		be planted in nursery
	1			beds/polythene bags having
	\$ 110,000			suitable potting media.
	/ MAMIT	\ \ ( )	-	Apply well decompose FYM @
	<b>\</b>	AIZAWL CH	AMP	15kg/pit/year along with
Din sanula	T21		_	100.50.100 g NPK per pit.
Pineapple	Flowering	1 1	-	Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04%
	stage	3 ~ (		
	}	1 3 2		· ·
	{ (		V	applied in the heart of the plant. In evening and only when plants have
	) )		)	at least 32 leaves.
	-	SERCHHIP	( 4	The flowering emergence will come
		V~ (	\	out after 55-60 days after chemical
				spraying.
			41 <u>4</u>	Apply split doses of fertilizer @ 60:
			· **	50:60 g per plant.
		LUNGLE	À 🚛	Remove all unwanted leaves,
	)	LUNGLEI		branches and weed near to the
	\	_ /		plant.
Colocasia	Vegetative		4	Remove unwanted plant near base
	stage	11 ( )4 (		of the plant and cut dead
	3			branches.
			4	Earthing up soil at base of the
		1) 63 4 4		plant along with split doses of
		\ \ \ (	L.	fertilizer.
		L AMBICTI ALS	4	Proper drainage is required to
		LAWNGTLAL	- 1	avoid water logging.
		SAIHA	#	Mulching with black polythene is
			₹.	found beneficial for both reducing
			٧	the weed and increasing the yield.
		7		
		- L		4   P a g e

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		Corm borer	4	Carbofuran 3G @1.5 kg a.i./ha
				applied in root zone when egg
				laying ooze is observed at plant
		/		base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
		remove all	4	Give irrigation at regular interval
		unwanted plant		Provide banana shading to
	\ \frac{1}{2}	from plot.	-	transplanted seedling.
	/	2. Provide split doses	4	Provide split doses of fertilizer @
	5	of fertilizer.		30kg/ha.
	)	5 4	4	Shallow rooted inter-row
				cultivation and hand weeding may
	1			be used to minimize weeds in the
	/ MAMIT	)		inter row zone.
	ζ	)		Black plastic mulch may be used
	\ \	AIZAWL CH	(AMP)	to suppress weed growth. The
	Ι			black plastic mulch also keeps the
	\	5		soil warm and encourages plant
	\ \			growth.
	) 6	1. Aphid (Aphis	•	Spray surf water solution to the
	\ \	gossypii)	1	plat
		SERCHHIP	7.	Spray any one of the insecticides
	1	SEROIIIII	I C	Imidacloprid 200 SL @ 0.25ml/lt of
	1	v 0		water (Sucking pest) or Dimethoate
			مام	30 % EC 7ml/10lt of water.
		2. Blister beetle	• )	Manual collection of insect and
			ζ	destroy it immediately.
	\	LUNGLEI	<b>F</b>	Apply cypermethrin 2 gm/lt of
	1			water.
		3. Flea beetle	•	Shake plants to dislodge grubs,
	`	(Phylliodes balyi)		pupae and adults and destroy.
			•	Spray any one of the insecticides
		190	)	Imidacloprid 200 SL @ 0.25ml/lt or
				Dimethoate 30 % EC 7ml/10lt of
				water.
		4 <mark>. Epilachna be</mark> etle.	`~\•	Collect damaged leaves with grubs
		(Epilachna		and egg masses and destroy them.
		viginctioctopancta	4	Spray with methyl parathion 0.5%
		ta)	الح	or dimethoate 0.3% is effective.
		5. Leafhopper	() •	Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of

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		devastans)		water (Sucking pest) or Dimethoate
		( Destarted With		30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt (Pseudomonas	•	Fields should be kept clean and
	1 /	solanacearum)		effected plants are to be uprooted and burnt.
	\ \	Solunacear any		Spray Copper fungicides to control
		KOLASIB		the disease (2% Bordeaux mixture.)
	ή.		•	The disease is more prevalent in
	/	~~ )		the presence of root knot
	)			Nematodes, so control of these
	1	2 5		nematodes will suppress the
				disease spread.
	} MAMIT	1	•	Soil drenching (Streptocycline
	(			sulphate 0.3 gm/lt of water) and Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage	AIZAWL CH	AMP/	Remove all unwanted leaves,
		5		branches and weed near to the
	\ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		plant.
	\		•	Earthing up the soil for better
	{ (		1	aeration.
	1 )		<i>&gt;</i>	Plant should be supported by
		SERCHHIP	(	bamboo or woods 20-25 days after
		Blister beetle	1.	sowing.  Manual collection of insect and
			싰	destroy it immediately.
		_	• \	Apply cypermethrin 2 gm/lt of
			5	water.
Brinjal	Vegetative \	LUNGLEI	)· 👍	Remove unwanted plant near base
	stage	~ (		of the plant and cut dead branches.
	,	10	4	Pre emergence application of
		1 (	_	Basalin @0.5 ml/lit of water for
			)	reduce grass type weed.
			4	Mulching with black polythene film
		1	L	reduces weed growth, increases the
		LAMBICTIALA	1.	crop growth.
		LAWNGTLAL	T	Split dose of fertilizer application @ 50kg/ha urea.
Tomato	Vegetative	V-1111A		Remove unwanted plant near base
	stage		Š	of the plant and cut dead
		100		branches.
				6   P a g e

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		I. Aphid(Aphis gossypii)	* * *	Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	A MAMIT	2. Epilachna beetle. <sub>CH</sub>	AMP/	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  Spray with methyl parathion 0.5% or dimethoate 0.3% is effective
Rice	Transplanting stage	viginctioctopancta ta) Kharif Rice	*	Land preparation is done by ploughing, harrowing, and levelling
		SERCHHIP	4	the field to make it suitable for crop establishment. Ploughing should be done 3-4 weeks prior to sowing. After ploughing, harrowing the field should be done twice, with one
		LUNGLEI	<u>.</u>	week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.
		Part 1	)	Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.
		LAWNGTLAI	\ S	Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage,
		7		7   Page

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	7	KOLASIB	involves an extra expense on seedlings. In case of transplanting with old seedlings, the number of seedlings per hill can be increased.  Remove the tip of rice seedling which reduces stem borer infestation.
Maize	Sowing stage	AIZAWL CH	<ul> <li>Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.</li> <li>Remove unwanted plant near base of the plant and cut dead branches.</li> <li>Earting up of soil along with fertilizer mixture.</li> <li>Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.</li> </ul>
Ginger and turmeric	Land preparation	LAWNGTLAI SAIHA	Remove unwanted plant near base of the plant and cut dead branches.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Earting up of soil along with fertilizer mixture.

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		Thrips	♣ Spray Roger or Monocrotophos (2.5
			ml/lt) for controlling thrips.
		Scales	Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
	) \		controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
	[	Respiratory	
	1	Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	)	(	vaccines at 2 months and yearly
		> 5	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
	₹	Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	\ \{	AIZAWL CH	Primary vaccination 6 month or
	)		above
	'i		Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	\		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



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#### ICAR RESEARCH COMPLEX FOR NEH RECION

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District: Lawngtlai Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	20	21	10	20	87
Max Temp (oC)	29	30	32	33	27
Min Temp (oC)	22	22	22	23	22
Cloud Coverage	Partially clear	Partially clear	Partially clear	Partially clear	Mainly cloudy
Max RH (%)	95	95	93	93	96
Min RH (%)	68	63	59	58	85
Wind Speed (KmpH)	7	7	7	6	10
*Wind Direction	S-E	S-E	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.

	Southerly- S, Sou	th-Westerly- <mark>S-W</mark> , Westerly	y-W, North-westerly- N-W.	
	•	•	deviation from normal in parenthesis)	
Aizawl- 383.6			a- 109.52 mm Kolasib- 352.38mm	
	8mm)	(250.30mm)	(87.2mm) (380.9mm)	
		-344.00mm Mam		
	5mm)	(186.21mm)	(442.80mm) (25.9mm)	
Weather su	mmary of the	Weather forecast v	ralid from 24th June, 2015 To 28th	
past th	ree days		June, 2015.	
		There are chances of moderate to heavy rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 27-33°C and 22-23°C. Maximum relative humidity is expected in the range of 93-96% and minimum may from 58-85%. Wind direction would be southeasterly with the wind speed of 6-10 km per hour. Dense cloudy sky will prevail during the next five days.  **Weekly cumulative rainfall: 159.0 mm**		
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural / animal	
Animal		Pest/ Diseases	husbandry advisories	
/Fisheries	Anna di r		T 11 11 11 11 11 11 11 11 11 11 11 11 11	
Khasi Wandarin	Transplant		Well rotten FYM @ 500g/pit is	
Mandarin and acid lime	stage	LAWNGTLAL	applied at 15-20 days before planting along with 12 g each of N	
and acid fille		SAIHA	and $K_2O/plant$ and 4 g of	
			$P_2O_5$ /plant.	
			12 g Nitrogen and Potash/plant is	

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	MAMIT	KOLASIB	recommended for first and second top dressing.  Sucker and slips are usually preferred for planting.  Potting mixture of soil, sand and FYM or compost should be in proper ratio.  For nursery only certified seed should be used.  Stagnation of water in beds should be avoided.  Seedling of uniform height should be selected for planting.  Plant protection measures should be apliked.
Khasi Mandarin and acid lime	Vegetative stage	SERCHHIP	Spray (10 ppm) of Gibberellic acid should be done at colour break stage to delay colour development, maintain firmness, extend harvesting period.  Fruit drops, which occur at least twice in each crop, should be controlled with the recommended doses of GA3, urea, benomyl and carbendazim at right time.  Insect pests like Blackfly (Kolshi), Citrus Psylla, Leaf miner, Bark eating caterpillar, Fruit sucking Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot should be controlled.  Recommended fungicide (Carbendazium) and proper doses (0.1% or 1000 ppm) should be sprayed at proper time (One month and 15 days before harvest i.e. two sprays).
Oil plam	Vegetative/ Harvesting stage	SAIHA	Remove all dead plants and replace with healthy seedling. Cleaning near base of the plant and cut unwanted branches.
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		KOLASIB	+	Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/MIT	SERCHHIP	HAMP +	Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem weevil  LAWNGTLAI  SAIHA	\\ \frac{1}{5}	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.  Application of over 100 g or neem

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



				oil was phytotoxic (harmful to
				plants) and uneconomical.
Passion Fruit	Nursery stage		+	When two to three leaves develop,
	7.7	7		seedling should be transplanted in
	) \	5		polythene bags.
	-	KOLASIB	-	The seedlings are planted in field
	- 1	KOLASIB	-	when they become 3-4 months old.
	1		-	Mature 30-35 cm long stem with 3
	(	"3 4 /		nodes of pencil thickness should
	7	(		be planted in nursery
	- 1	7 5		beds/polythene bags having
			_	suitable potting media.
	· · · · · · · · · · · · · · · · · · ·		-	Apply well decompose FYM @
	/ MAMIT	1		15kg/pit/year along with
		AIZAWL CH	AMP	100.50.100 g NPK per pit.
Pineapple	Flowering		-	Apply flowering inducing chemical
	stage	1		(Ethrel 10 PPM+2% urea+0.04%
	),			Sodium Carbonate) should be
	1			applied in the heart of the plant. In
	- (	~ / / · ·		evening and only when plants have at least 32 leaves.
	))			
	<i></i>	SERCHHIP	/ *	The flowering emergence will come
		V~ L_	>	out after 55-60 days after chemical
	1		1	spraying.  Apply split doses of fertilizer @ 60:
			44	50:60 g per plant.
		_	h 🔟	Remove all unwanted leaves,
		LUNGUE	7	branches and weed near to the
	>	LUNGLEI	7	plant.
Colocasia	Vegetative	~ (	4	Remove unwanted plant near base
	stage			of the plant and cut dead
	· ·	1111		branches.
			. 4	Earthing up soil at base of the
			7	plant along with split doses of
				fertilizer.
		1	4	Proper drainage is required to
		LAWNGTLAL		avoid water logging.
		SAIHA	+	Mulching with black polythene is
		( SAIHA		found beneficial for both reducing
			K.	the weed and increasing the yield.
		Corm borer	$\smile$	Carbofuran 3G @1.5 kg a.i./ha
		<del> </del>		1   D o o o
		74		4   P a g e

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				applied in root zone when egg
				laying ooze is observed at plant base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
		remove all	1	Give irrigation at regular interval
	\ \	unwanted plant	4	Provide banana shading to
	]	from plot.		transplanted seedling.
	i i	2. Provide split doses	4	Provide split doses of fertilizer @
	/	of fertilizer.		30kg/ha.
	7		+	Shallow rooted inter-row
	1	2 5		cultivation and hand weeding may
				be used to minimize weeds in the
	∫ <sub>MAMIT</sub>			inter row zone.
	/	\ \ \ \ \ \	-	Black plastic mulch may be used to suppress weed growth. The
	}	AIZAWL CH	AMP/	black plastic mulch also keeps the
	\ \	1		soil warm and encourages plant
	\	5 3		growth.
	\	1. Aphid (Aphis	•	Spray surf water solution to the
	) (	gossypii)	-	plat
	) )		<b>)</b>	Spray any one of the insecticides
		SERCHHIP		Imidacloprid 200 SL @ 0.25ml/lt of
	ì	V~ L_	<b> </b> }	water (Sucking pest) or Dimethoate
	-	2. Blister beetle		30 % EC 7ml/10lt of water.  Manual collection of insect and
		2. Blister beetle	N.	destroy it immediately.
				Apply cypermethrin 2 gm/lt of
	\	LUNGLEI	4	water.
	5	3. Flea beetle		Shake plants to dislodge grubs,
	l l	(Phylliodes balyi)		pupae and adults and destroy.
	,	10	•	Spray any one of the insecticides
				Imidacloprid 200 SL @ 0.25ml/lt or
			)	Dimethoate 30 % EC 7ml/10lt of
			(	water.
		4. Epilachna beetle.	L.	Collect damaged leaves with grubs
		(Epilachna viginctioctopancta	1	and egg masses and destroy them.
		ta) SAIHA	ľ	Spray with methyl parathion 0.5% or dimethoate 0.3% is effective.
		5. Leafhopper		Spray any one of the insecticides
		(Empoasca	V .	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)	~	water (Sucking pest) or Dimethoate
	ı	N. A	1	5   Page

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				30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt	•	Fields should be kept clean and
		(Pseudomonas		effected plants are to be uprooted
	1 1	solanacearum)		and burnt. Spray Copper fungicides to control
	\ \	( )	_	the disease (2% Bordeaux mixture.)
		KOLASIB		The disease is more prevalent in
	\ \		-	the presence of root knot
	(	"3 a /		Nematodes, so control of these
	7			nematodes will suppress the
	[	3 2		disease spread. Soil drenching (Streptocycline
	Į į		•	Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and
	/ MAMIT	\ )		Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage	AIZAWL CH	A MPA	Remove all unwanted leaves,
	)			branches and weed near to the
	l l			plant
	1		•	Earthing up the soil for better aeration.
	) ,		\.	Plant should be supported by
	) )		)	bamboo or woods 20-25 days after
	(	SERCHHIP		sowing.
	1	Blister beetle	\ <b>^•</b>	Manual collection of insect and
	\ \ \ \ \			destroy it immediately.
		_	/	Apply cypermethrin 2 gm/lt of water.
Brinjal	Vegetative		<b>4</b>	Remove unwanted plant near base
	stage	LUNGLEI	F	of the plant and cut dead
	\	~ /		branches.
	1		-	Pre emergence application of Basalin @0.5 ml/lit of water for
				reduce grass type weed.
		1 7 0 1	) 👍	Mulching with black polythene film
		1 6 9		reduces weed growth, increases the
		V (	L	crop growth.  Split dose of fertilizer application @
		LAWNGTLAL		50kg/ha urea.
Tomato	Vegetative	SAIHA	4	Remove unwanted plant near base
	stage		الحا	of the plant and cut dead
			U	branches.
			-	Pre emergence application of
		- N		6   P a g e

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		KOLASIB  1. Aphid(Aphis gossypii)	+	Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	MAMIT	viginctioctopaneta	• IAMPA	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  Spray with methyl parathion 0.5% or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting stage	Kharif Rice  SERCHHIP  LUNGLEI  LAWNGTLAI  SAIHA	* * * * * * * * * * * * * * * * * * * *	Land preparation is done by ploughing, harrowing, and levelling the field to make it suitable for crop establishment.  Ploughing should be done 3-4 weeks prior to sowing.  After ploughing, harrowing the field should be done twice, with one week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.  Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.  Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage, involves an extra expense on
		SAIHA	۲)	more see being a

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				seedlings. In case of transplanting
				with old seedlings, the number of
	r			seedlings per hill can be increased.
		/ /	4	Remove the tip of rice seedling
	) \	2		which reduces stem borer
	L.	Λ		infestation.
Maize	Sowing stage	KOLASIB	4	Pre-emergence application of
	\ \ \			Atrazine (Atratraf 50 wp, Gesaprim
	/	W \		500 fw) @ of 1.0-1.5 kg a.i ha-1in
	>			600 litre water, Alachlor (Lasso) @
	}	3 4		2-2.5 kg a.i ha-1, Metolachlor
				(Dual) @ 1.5-2.0 kg a.i ha-1,
	· /			Pendamethalin (Stomp) @ 1-1.5 kg
	MAMI7	1		a.i. ha-large effective way for
	(	)		control of many annual and broad
	\ \	AIZAWL CH	IAMP/	leaved weeds.
	\		4	Remove unwanted plant near base
	\	5		of the plant and cut dead
	\			branches.
	) ,		- 4	Earting up of soil along with
	\ \		1	fertilizer mixture.
		SERCHHIP	/4	Foliar spray of 0.1 % Endosulfan {2
		3EKUNNIF		ml (35 EC) in litre water) at 30
		·	1	days after germination is very
				effective against stem borer.
Ginger and	Land		4	Remove unwanted plant near base
turmeric	preparatio <mark>n</mark>	· ·	R	of the plant and cut dead
		LUNGLEI	1	branches.
	7		+	Pre-emergence application of
	l l	(		Atrazine (Atratraf 50 wp, Gesaprim
	,			500 fw) @ of 1.0-1.5 kg a.i ha-1in
				600 litre water, Alachlor (Lasso) @
			\	2-2.5 kg a.i ha-1, Metolachlor
			l l	(Dual) @ 1.5-2.0 kg a.i ha-1,
		) 5		Pendamethalin (Stomp) @ 1-1.5 kg
			4	a.i. ha-large effective way for
		LAWNGTLAL		control of many annual and broad
		SAIHA		leaved weeds.
		SAINA	+	Earting up of soil along with
			Ç.	fertilizer mixture.
		Thrips	$\smile$ $\blacksquare$	Spray Roger or Monocrotophos (2.5
		6 7		

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			ml/lt) for controlling thrips.
		Scales	♣ Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
			controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
		Respiratory Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	/	~~ }	vaccines at 2 months and yearly
	)	(	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
		Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	/ MAMIT	1	Primary vaccination 6 month or
	5	AIZAWL CH	AMPA above
		S	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	<u>\</u>		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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District: Lunglei Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	7	8	9	13	7
Max Temp (oC)	34	32	31	31	30
Min Temp (oC)	21	21	22	21	22
Cloud Coverage	Partially clear	Partially clear	Partially clear	Partially clear	Mainly cloudy
Max RH (%)	98	96	95	97	96
Min RH (%)	65	59	52	59	75
Wind Speed (KmpH)	5	5	4	5	8
*Wind Direction	S-E	S-E	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.

Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.						
•	deviation from normal in parenthesis)					
	a- 109.52 mm Kolasib- 352.38mm					
· · · · · · · · · · · · · · · · · · ·	(87.2mm) (380.9mm)					
	nit-449.48mm Serchhip-411.72mm					
	(442.80mm) (25.9mm)					
Weather forecast v	Weather forecast valid from 24 <sup>th</sup> June, 2015 To 28 <sup>th</sup>					
	June, 2015.					
There are chances of moderate to light rainfall during the next 5 days. The maximum and minimum temperatures for the next 5 days may range for 30-34°C and 21-22°C. Maximum relative humidity is expected in the range of 95-98% and minimum may from 52-75%. Wind direction would be southeasterly with the wind speed of 4-5 km per hour. Partially cloudy sky will prevail during the next five days.  Weekly cumulative rainfall: 44.0 mm						
Cultural practices/	Agricultural / Horticultural/ animal					
Pest/ Diseases	husbandry advisories					
1	Well rotten FYM @ 500g/pit is					
	applied at 15-20 days before planting along with 12 g each of N					
SAIHA	and $K_2O/plant$ and 4 g of					
	$P_2O_5$ /plant.					
	1205/ plant. 12 g Nitrogen and Potash/plant is					
	T1-31, 2015 (Percent of ai- 239.49mm Saih (250.30mm) i-344.00mm Mam (186.21mm)  Weather forecast value of next 5 days. The maximum relative hum 98% and minimum make southeasterly with Partially cloudy sky with the next of next 5 days may be southeasterly with Partially cloudy sky with the next of next 5 days may be southeasterly with Partially cloudy sky with the next of next of next 5 days may be southeasterly with Partially cloudy sky with the next of next					

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	MAMIT	KOLASIB	recommended for first and second top dressing.  Sucker and slips are usually preferred for planting.  Potting mixture of soil, sand and FYM or compost should be in proper ratio.  For nursery only certified seed should be used.  Stagnation of water in beds should be avoided.  Seedling of uniform height should be selected for planting.  Plant protection measures should be apliked.
Khasi Mandarin and acid lime	Vegetative stage	SERCHHIP	Spray (10 ppm) of Gibberellic acid should be done at colour break stage to delay colour development, maintain firmness, extend harvesting period.  Fruit drops, which occur at least twice in each crop, should be controlled with the recommended doses of GA3, urea, benomyl and carbendazim at right time.  Insect pests like Blackfly (Kolshi), Citrus Psylla, Leaf miner, Bark eating caterpillar, Fruit sucking Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot should be controlled.  Recommended fungicide (Carbendazium) and proper doses (0.1% or 1000 ppm) should be sprayed at proper time (One month and 15 days before harvest i.e. two sprays).
Oil plam	Vegetative/ Harvesting stage	SAIHA	Remove all dead plants and replace with healthy seedling. Cleaning near base of the plant and cut unwanted branches.
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		KOLASIB	+	Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/MIT	SERCHHIP	HAMP +	Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem weevil	\$ 5 5	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.  Application of over 100 g or neem

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				oil was phytotoxic (harmful to
				plants) and uneconomical.
Passion Fruit	Nursery stage	S	-	When two to three leaves develop,
	1	3		seedling should be transplanted in
	) \	5	١	polythene bags.
	"	KOLASIB	-	The seedlings are planted in field
	1	KOLAGID	-	when they become 3-4 months old.
	}	64	-	Mature 30-35 cm long stem with 3
	(	3 4 /		nodes of pencil thickness should
	7	(		be planted in nursery
	/	2 5		beds/polythene bags having
				suitable potting media.
	5		-	Apply well decompose FYM @
	/ MAMIT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		15kg/pit/year along with
Dimografia	Floresias	( AIZAWL CH	AMP:	100.50.100 g NPK per pit.
Pineapple	Flowering stage		-	Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04%
	stage	1		Sodium Carbonate) should be
	λ,			applied in the heart of the plant. In
				evening and only when plants have
	( (		1	at least 32 leaves.
	1.7		4	The flowering emergence will come
		SERCHHIP		out after 55-60 days after chemical
		V C-	7	spraying.
			4	Apply split doses of fertilizer @ 60:
		~		50:60 g per plant.
			<b>*</b>	Remove all unwanted leaves,
		LUNGLEI	12	branches and weed near to the
	<u> </u>			plant.
Colocasia	Vegetative		4	Remove unwanted plant near base
	stage			of the plant and cut dead
			١	branches.
			۱ 🐣	Earthing up soil at base of the
			ľ	plant along with split doses of
			۱ .	fertilizer.
			4	Proper drainage is required to
		LAWNGTLAJ		avoid water logging.
		/ SAIHA	1	Mulching with black polythene is found beneficial for both reducing
			البرا	the weed and increasing the yield.
		Corm borer	\ <u>_</u>	Carbofuran 3G @1.5 kg a.i./ha
		Com boici	_	Carboidian od wr.o kg a.i./ iid
		14 /		4   P a g e

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				applied in root zone when egg
				laying ooze is observed at plant
				base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
	7 (	remove all	4	Give irrigation at regular interval
	\ \-	unwanted plant	4	Provide banana shading to
		from plot.		transplanted seedling.
	\ \ \	2. Provide split doses	4	Provide split doses of fertilizer @
	/	of fertilizer.		30kg/ha.
	\ \ \		4	Shallow rooted inter-row
	}	5 6		cultivation and hand weeding may
				be used to minimize weeds in the
	<b>!</b>			inter row zone.
	/ MAMIT	( )	4	Black plastic mulch may be used
	ζ	AIZAWL CH	AMP)	to suppress weed growth. The
	\	AIZAME CIT	H WITT	black plastic mulch also keeps the
	\	5		soil warm and encourages plant
	\			growth.
	\ \	1. Aphid (Aphis	•	Spray surf water solution to the
	) (	gossypii)	-	plat
	) )		· `}•	Spray any one of the insecticides
		SERCHHIP	1	Imidacloprid 200 SL @ 0.25ml/lt of
		V	N.	water (Sucking pest) or Dimethoate
				30 % EC 7ml/10lt of water.
		2. Blister beetle		Manual collection of insect and
		-	(	destroy it immediately.
			( •	Apply cypermethrin 2 gm/lt of
	1	LUNGLEI	J*	water.
	₹	3. Flea beetle	•	Shake plants to dislodge grubs,
	l l	(Phylliodes balyi)		pupae and adults and destroy.
		10	•	Spray any one of the insecticides
				Imidacloprid 200 SL @ 0.25ml/lt or
		177	)	Dimethoate 30 % EC 7ml/10lt of
			1	water.
		4. Epilachna beetle.	•	Collect damaged leaves with grubs
		(Epilachna	7	and egg masses and destroy them.
		viginctioctopancta	•	Spray with methyl parathion 0.5%
		ta) 🖊 SAIHA	1	or dimethoate 0.3% is effective.
		5. Leafhopper	_	Spray any one of the insecticides
		(Empoasca	Ü	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)		water (Sucking pest) or Dimethoate
				,

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

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



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				30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt		,
			•	Fields should be kept clean and
		(Pseudomonas		effected plants are to be uprooted
	\ \ \ \	solanacearum)		and burnt.
	1 \	5	•	Spray Copper fungicides to control
	"	KOLASIB		the disease (2% Bordeaux mixture.)
	1	KOLAGIB		The disease is more prevalent in
	}		_	the presence of root knot
	(	" 3		Nematodes, so control of these
	)	(		nematodes will suppress the
	}	> -		disease spread.
			•	Soil drenching (Streptocycline
	- {			sulphate 0.3 gm/lt of water) and
	/ MAMIT	( )		Blitox 50 @ 5gm/15lt water.
French bean	Flowering stage	AIZAWL CH	A IMPOV	Remove all unwanted leaves,
	7	ALEATTE	CARRIER	branches and weed near to the
	\	5		plant.
	\	1 2	•	Earthing up the soil for better
	1			aeration.
	) (		<b>\.</b>	Plant should be supported by
	) )		)	bamboo or woods 20-25 days after
		SERCHHIP	1	sowing.
		Blister beetle	\•	Manual collection of insect and
	1			destroy it immediately.
	)	1	بملم	Apply cypermethrin 2 gm/lt of
		_	1	water.
Brinjal	Vegetative		√	Remove unwanted plant near base
	stage	LUNGLEI	F	of the plant and cut dead
	(	)		branches.
		5	4	Pre emergence application of
				Basalin @0.5 ml/lit of water for
				reduce grass type weed.
			) 👍	Mulching with black polythene film
				reduces weed growth, increases the
		( )	)	crop growth.
		1 1	1	Split dose of fertilizer application @
		LAWNGTLAL		50kg/ha urea.
Tomato	Vegetative	SAIHA	#	Remove unwanted plant near base
	stage		J-	of the plant and cut dead
			1.3.	11
			Ο.	branches. Pre emergence application of

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		KOLASIB 1. Aphid(Aphis	Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the
	}	gossypii)	plat.  • Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.
	MAMIT	viginctioctopancta ta)	• Spray with methyl parathion 0.5% or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting	LUNGLEI  LAWNGTLAI SAIHA	Land preparation is done by ploughing, harrowing, and levelling the field to make it suitable for crop establishment.  Ploughing should be done 3-4 weeks prior to sowing.  After ploughing, harrowing the field should be done twice, with one week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.  Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.  Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage, involves an extra expense on
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KOLASIR	infestation.
Maize Sowing stage  MAMIT  AIZAWL  SERCHHIP	Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Remove unwanted plant near base of the plant and cut dead branches.  Earting up of soil along with fertilizer mixture.  Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30
Ginger and turmeric Lungles  Land preparation  Lungles  Lawngtlas Saiha  Thrips	days after germination is very effective against stem borer.  Remove unwanted plant near base of the plant and cut dead branches.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Earting up of soil along with fertilizer mixture.  Spray Roger or Monocrotophos (2.5)

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			ml/lt) for controlling thrips.
		Scales	♣ Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
	( )	7	controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
	"	Respiratory	
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	/	" 7	vaccines at 2 months and yearly
	7		interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
		Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	/ MAMII		Primary vaccination 6 month or
	\ \frac{1}{2}	AIZAWL CH	AMPA above
			Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	),		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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		SAIHA	\

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Period: 24 - 28 June, 2015 **District: Mamit** 

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	8	7	7	13	21
Max Temp (oC)	30	32	34	35	33
Min Temp (oC)	22	23	23	24	23
Cloud Coverage	Partially clear	Mainly clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	95	92	93	97	92
Min RH (%)	71	63	49	56	70
Wind Speed (KmpH)	6	4	3	5	7
*Wind Direction	S-E	S-E	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 PREMONSOON- May 1-31, 2015 (Percent of deviation from normal in parenthesis)					
Aizawl- 383.6	8mm Champha	ai- 239.49mm Sai	na- 109.52 mm	Kolasib- 352.38mm	
	8mm)	(250.30mm)	(87.2mm)		
_		i-344.00mm Ma		<del>-</del>	
•	5mm)	(186.21mm)		(25.9mm)	
Weather su	mmary of the	Weather forecast	valid from 24 <sup>th</sup> J	une, 2015 To 28 <sup>th</sup>	
past tl	hree days		June, 2015.		
		There are chances o	f moderate to ligi	ht rainfall during the	
		next 5 day. The maximum and minimum temperatures for			
		the next 5 days may range for 30-35°C and 23-24°C.			
		Maximum relative humidity is expected in the range of 92-			
		97% and minimum may from 49-71%. Wind direction would			
		be southeasterly with the wind speed of 3-7 km per hour.			
		Partially cloudy sky will prevail during the next five days.			
		provair daring the first the days.			
		Weekly cumulative rainfall: 56.0 mm			
Main Crop/	Stage	Cultural practices/		Horticultural/ animal	
Animal		Pest/ Diseases	_	dry advisories	
/Fisheries				•	
Khasi	Transplant		<b>≒</b> Well rotten	FYM @ 500g/pit is	
Mandarin	stage	\LAWNGTLAJ∕>	applied at	15-20 days before	

SAIHA

1 | P a g e

planting along with 12 g each of N

and K<sub>2</sub>O/plant and 4 g of

12 g Nitrogen and Potash/plant is

 $P_2O_5/plant$ .

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and acid lime



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	MAMIT	KOLASIB	recommended for first and second top dressing.  Sucker and slips are usually preferred for planting.  Potting mixture of soil, sand and FYM or compost should be in proper ratio.  For nursery only certified seed should be used.  Stagnation of water in beds should be avoided.  Seedling of uniform height should be selected for planting.  Plant protection measures should be apliked.
Khasi Mandarin and acid lime	Vegetative	SERCHHIP	Spray (10 ppm) of Gibberellic acid should be done at colour break stage to delay colour development, maintain firmness, extend harvesting period.  Fruit drops, which occur at least twice in each crop, should be controlled with the recommended doses of GA3, urea, benomyl and carbendazim at right time.  Insect pests like Blackfly (Kolshi), Citrus Psylla, Leaf miner, Bark eating caterpillar, Fruit sucking Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot should be controlled.  Recommended fungicide (Carbendazium) and proper doses (0.1% or 1000 ppm) should be sprayed at proper time (One month and 15 days before harvest i.e. two sprays).
Oil plam	Vegetative/ Harvesting stage	SAIHA	Remove all dead plants and replace with healthy seedling. Cleaning near base of the plant and cut unwanted branches.
		4 7	2   P a g e

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		KOLASIB	*	Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/MIT	SERCHHIE	HAMP +	Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem weevil  LAWNGTLAI  SAIHA	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.  Application of over 100 g or neem

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				oil was phytotoxic (harmful to
		/		plants) and uneconomical.
Passion Fruit	Nursery stage		+	When two to three leaves develop,
	( )	7		seedling should be transplanted in
	) \			polythene bags.
	-	Λ {	4	The seedlings are planted in field
	]	KOLASIB	-	when they become 3-4 months old.
	1		#	Mature 30-35 cm long stem with 3
	/	~~ )		nodes of pencil thickness should
	· · · · · · · · · · · · · · · · · · ·			be planted in nursery
	}	> 5		beds/polythene bags having
				suitable potting media.
	{	/ T	+	Apply well decompose FYM @
	/ MAMIT			15kg/pit/year along with
	<u> </u>	Jaizawi Pou	AMP	100.50.100 g NPK per pit.
Pineapple	Flowering	3	4	Apply flowering inducing chemical
	stage			(Ethrel 10 PPM+2% urea+0.04%
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	~ /		Sodium Carbonate) should be
	1			applied in the heart of the plant. In
	1	$\rightarrow$	<b>\</b>	evening and only when plants have
	) )		<u> </u>	at least 32 leaves.
		SERCHHIP	/*	The flowering emergence will come
	1		١,	out after 55-60 days after chemical
	}		l ( .	spraying.
				Apply split doses of fertilizer @ 60:
		_	( )	_50:60 g per plant.  Remove all unwanted leaves,
			\ <b>*</b>	•
		LUNGLEI	F	branches and weed near to the plant.
Colocasia	Vegetative		4	Remove unwanted plant near base
Colocasia	stage	2	_	of the plant and cut dead
	suge	111		branches.
			4	Earthing up soil at base of the
			)	plant along with split doses of
		1 6 4		fertilizer.
		V (	L. 4	Proper drainage is required to
		L AMBIETT AT A	1	avoid water logging.
		LAWNGTLAL	#	Mulching with black polythene is
		SAIHA		found beneficial for both reducing
			5	the weed and increasing the yield.
		Corm borer	$\circ$	Carbofuran 3G @1.5 kg a.i./ha
		6 7		
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				applied in root zone when egg
				laying ooze is observed at plant base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
		remove all	4	Give irrigation at regular interval
	\ \_	unwanted plant	4	Provide banana shading to
		from plot.		transplanted seedling.
	ή.	2. Provide split doses	4	Provide split doses of fertilizer @
	/	of fertilizer.		30kg/ha.
	)		+	Shallow rooted inter-row
	1	2 5		cultivation and hand weeding may
				be used to minimize weeds in the
	∫ <sub>MAMIT</sub>			inter row zone.
	/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_	Black plastic mulch may be used to suppress weed growth. The
	₹	( AIZAWL ∫ CH	(AMP	black plastic mulch also keeps the
	\	}		soil warm and encourages plant
	\	S - 3		growth.
	/	1. Aphid (Aphis	•	Spray surf water solution to the
	1 1	gossypii)	_	plat
	) )		•	Spray any one of the insecticides
	Ş	SERCHHIP		Imidacloprid 200 SL @ 0.25ml/lt of
	1	V L	>	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.
		2. Blister beetle		Manual collection of insect and
			( )	destroy it immediately.
				Apply cypermethrin 2 gm/lt of
		LUNGLEI	j^2	water.
	1	3. Flea beetle	•	Shake plants to dislodge grubs,
	\	(Phylliodes balyi)		pupae and adults and destroy.
		A A	•	Spray any one of the insecticides
				Imidacloprid 200 SL @ 0.25ml/lt or
			)	Dimethoate 30 % EC 7ml/10lt of water.
		4. Epilachna beetle.	. •	Collect damaged leaves with grubs
		(Epilachna	5	and egg masses and destroy them.
		viginctioctopancta		Spray with methyl parathion 0.5%
		ta) SAIHA	L١	or dimethoate 0.3% is effective.
		5. Leafhopper		Spray any one of the insecticides
		(Empoasca	Ü	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)		water (Sucking pest) or Dimethoate
		1		5   P a g e

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				30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt	•	Fields should be kept clean and
		(Pseudomonas		effected plants are to be uprooted
	7 1	solanacearum)		and burnt.
	\ \	(	•	Spray Copper fungicides to control the disease (2% Bordeaux mixture.)
		KOLASIB		The disease is more prevalent in
	\ \		-	the presence of root knot
	(	"3 4 /		Nematodes, so control of these
	7			nematodes will suppress the
	[			disease spread. Soil drenching (Streptocycline
	1		•	Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and
	/ MAMIT	\ )		Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage	AIZAWL CH	AMP/	Remove all unwanted leaves,
	ì			branches and weed near to the
	l l			plant
	1		•	Earthing up the soil for better aeration.
	) (		<b>√.</b>	Plant should be supported by
	) )		)	bamboo or woods 20-25 days after
	(-/ <u>-</u> /	SERCHHIP		sowing.
	\	Blister beetle	\ <b>`</b>	Manual collection of insect and
	\ \ \ \ \			destroy it immediately.
		_	/	Apply cypermethrin 2 gm/lt of water.
Brinjal	Vegetative		<b>4</b>	Remove unwanted plant near base
	stage	LUNGLEI	Ε.	of the plant and cut dead
	\	/		branches.
	1		*	Pre emergence application of Basalin @0.5 ml/lit of water for
				reduce grass type weed.
			) 👍	Mulching with black polythene film
		( ( ) \ (		reduces weed growth, increases the
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	L,	crop growth.
		LAWNGTLAL	1	Split dose of fertilizer application @ 50kg/ha urea.
Tomato	Vegetative	SAIHA	4	Remove unwanted plant near base
	stage		الح	of the plant and cut dead
			ٽ <u>.</u>	branches.
			*	Pre emergence application of
		4		6   P a g e

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	}	KOLASIB  1. Aphid(Aphis gossypii)	Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	MAMIT	2. Epilachna beetle. (Epilachna viginctioctopancta	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  • Spray with methyl parathion 0.5% or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting stage	Kharif Rice  SERCHHIP  LUNGLEI  LAWNGTLAI  SAIHA	<ul> <li>Land preparation is done by ploughing, harrowing, and levelling the field to make it suitable for crop establishment.</li> <li>Ploughing should be done 3-4 weeks prior to sowing.</li> <li>After ploughing, harrowing the field should be done twice, with one week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.</li> <li>Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.</li> <li>Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage, involves an extra expense on</li> </ul>
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			1	
				seedlings. In case of transplanting
				with old seedlings, the number of
				seedlings per hill can be increased.
		/ /	4	Remove the tip of rice seedling
	) \	2		which reduces stem borer
	L.	Λ		infestation.
Maize	Sowing stage	KOLASIB	-	Pre-emergence application of
	\ \ \			Atrazine (Atratraf 50 wp, Gesaprim
	/	W \		500 fw) @ of 1.0-1.5 kg a.i ha-1in
	>			600 litre water, Alachlor (Lasso) @
	}	3 4		2-2.5 kg a.i ha-1, Metolachlor
				(Dual) @ 1.5-2.0 kg a.i ha-1,
	· /			Pendamethalin (Stomp) @ 1-1.5 kg
	MAMI7	1		a.i. ha-large effective way for
	(	)		control of many annual and broad
	\ \	AIZAWL CH	AMP)	leaved weeds.
	\		4	Remove unwanted plant near base
	\	5		of the plant and cut dead
	\			branches.
	) ,		-, 4	Earting up of soil along with
	\ \		1	fertilizer mixture.
		SERCHHIP	/4	Foliar spray of 0.1 % Endosulfan {2
		SERGHAIF	K	ml (35 EC) in litre water} at 30
		· · · · · · · · · · · · · · · · · · ·	1	days after germination is very
				effective against stem borer.
Ginger and	Land		4	Remove unwanted plant near base
turmeric	preparatio <mark>n</mark>	· ·	R	of the plant and cut dead
		LUNGLEI	j^2	branches.
	7		4	Pre-emergence application of
	l l	~ (		Atrazine (Atratraf 50 wp, Gesaprim
	,			500 fw) @ of 1.0-1.5 kg a.i ha-1in
				600 litre water, Alachlor (Lasso) @
			\	2-2.5 kg a.i ha-1, Metolachlor
			l l	(Dual) @ 1.5-2.0 kg a.i ha-1,
		) 5		Pendamethalin (Stomp) @ 1-1.5 kg
			4	a.i. ha-large effective way for
		LAWNGTLAL		control of many annual and broad
		SAIHA	\.	leaved weeds.
		SAINA	<del>  +</del>	Earting up of soil along with
			T.	fertilizer mixture.
		Thrips	$\hookrightarrow$	Spray Roger or Monocrotophos (2.5
		6 7		

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			ml/lt) for controlling thrips.		
		Scales	♣ Spray Quinalphos or		
			Monocrotophos (2.5 ml/lt) for		
			controlling scales.		
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.		
		Respiratory Syndrome (PRRS).			
	Adult stage	Swine fever.	2. Vaccination of pigs with SF		
	/	~~ }	vaccines at 2 months and yearly		
	)	(	interval/6 month interval		
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and		
		Disease (FMD)	repeat every 6 month.		
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).		
	/ MAMIT	1	Primary vaccination 6 month or		
	5	AIZAWL CH	AMPA above		
			Revaccination annually		
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth		
	<u>\</u>		and R <sub>2</sub> B vaccine for adult birds.		
	Early stage	Coccidiosis	Amprolium or coccidiostat		



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District: Saiha Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	16	7	0	10	103
Max Temp (oC)	29	29	31	32	25
Min Temp (oC)	20	21	21	22	21
Cloud Coverage	Partially clear				
Max RH (%)	97	98	96	96	97
Min RH (%)	67	63	59	60	89
Wind Speed (KmpH)	4	4	4	4	4
*Wind Direction	E	S-E	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 PREMONSOON- May 1-31, 2015 (Percent of deviation from normal in parenthesis) Champhai- 239.49mm Saiha- 109.52 mm Aizawl- 383.68mm Kolasib- 352.38mm (250.30mm)(341.8mm)(87.2mm)(380.9mm)Lunglei-344.00mm **Mamit-449.48mm** Lawngtlai-321.51mm Serchhip-411.72mm (285.5mm)(442.80mm)(186.21mm)(25.9mm)

Weather summary of the past three days

Weather forecast valid from 24th June, 2015 To 28th June, 2015.

There are chances of moderate to light and heavy rainfall during the next 4 day. The maximum and minimum temperatures for the next 5 days may range for 25-32°C and 20-22°C. Maximum relative humidity is expected in the range of 96-98% and minimum may from 59-89%. Wind direction would be easterly to north westerly with the wind speed of 4 km per hour. Partially cloudy sky will prevail during the next five days.

Weekly cumulative rainfall: 136.0 mmMain Crop/<br/>AnimalStage<br/>Pest/ DiseasesAgricultural / Horticultural/ animal<br/>husbandry advisories

Fisheries

Khasi
Mandarin
and acid lime

Transplant
stage

SAIHA

Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K₂O/plant and 4 g of P₂O₅/plant.

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			+	12 g Nitrogen and Potash/plant is recommended for first and second
	<u> </u>			top dressing.
	7 )	3	-	Sucker and slips are usually preferred for planting.
	\ \	(	4	Potting mixture of soil, sand and
		KOLASIB		FYM or compost should be in
	\ \			proper ratio.
	/	" 3 4 )	+	For nursery only certified seed
	7			should be used.
	/		-	Stagnation of water in beds should be avoided.
	J		4	Seedling of uniform height should
	MAMIT	1		be selected for planting.
	ζ			Plant protection measures should
	1	AIZAWL CH	AMP)	be apuked.
Khasi	Vegetative	1 2	+	Spray (10 ppm) of Gibberellic acid
Mandarin and acid lime	stage	3 ~ (		should be done at colour break stage to delay colour development,
and acid nine	\ .	1 3 2	_	maintain firmness, extend
	{ (		1	harvesting period.
		SERCHHIP	/4	Fruit drops, which occur at least
	1	SERCHHIE		twice in each crop, should be
				controlled with the recommended
	)			doses of GA3, urea, benomyl and
		_	1	carbendazim at right time. Insect pests like Blackfly (Kolshi),
		LUNGLEI	7	Citrus Psylla, Leaf miner, Bark
	)	LUNGLEI		eating caterpillar, Fruit sucking
	1			Moth, Mites, Twing Blight,
	1	10		Gummosis, Root rot and Collar rot
				should be controlled.
			) 🔭	Recommended fungicide (Carbendazium) and proper doses
		( ( ) \ (		(0.1% or 1000 ppm) should be
		7	L	sprayed at proper time (One month
		LAWNGTLAL	1	and 15 days before harvest i.e. two
				sprays).
Oil plam	Vegetative/	SAIHA	1	Remove all dead plants and replace
	Harvesting stage		5.	with healthy seedling.
	Stage	2	-	Cleaning near base of the plant
		1 1		2   P a g e

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Banana	MAMIT Vegetative/	KOLASIB	and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/ harvesting	SERCHHIP	<ul> <li>Cleaning near base of the plant and cut unwanted branches.</li> <li>Application of split dose of fertilizer 600: 200:100 (g/pt).</li> <li>Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.</li> <li>Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease.</li> <li>Fruits are harvested when they attain full size, develop attractive yellow colour.</li> </ul>
		Comb weevil and stem weevil LAWNGTLAL SAIHA	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.
		17	3   P a g e

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			4	Application of over 100 g or neem oil was phytotoxic (harmful to
Dennie v Dunie	NT		-	plants) and uneconomical.
Passion Fruit	Nursery stage	3	-	When two to three leaves develop,
	1 \	x )		seedling should be transplanted in
		KOLASIB		polythene bags.
	- L	7		The seedlings are planted in field
		W. 1		when they become 3-4 months old.
	(	3 4 /	-	Mature 30-35 cm long stem with 3
	- {	(		nodes of pencil thickness should
	- /	7 5		be planted in nursery
	1			beds/polythene bags having
	\$ 110,000			suitable potting media.
	/ MAMIT	\ \ ( )	-	Apply well decompose FYM @
	<b>\</b>	AIZAWL CH	AMP	15kg/pit/year along with
Din sanula	T21		_	100.50.100 g NPK per pit.
Pineapple	Flowering	1 1	-	Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04%
	stage	3 ~ (		
	}	1 3 2		· ·
	{ (		V	applied in the heart of the plant. In evening and only when plants have
	) )		)	at least 32 leaves.
	-	SERCHHIP	( 4	The flowering emergence will come
		V~ (	\	out after 55-60 days after chemical
				spraying.
			41 <u>4</u>	Apply split doses of fertilizer @ 60:
			· **	50:60 g per plant.
		LUNGLE	À 🚛	Remove all unwanted leaves,
	)	LUNGLEI		branches and weed near to the
	\	_ /		plant.
Colocasia	Vegetative		4	Remove unwanted plant near base
	stage	11 ( )4 (		of the plant and cut dead
	3			branches.
			4	Earthing up soil at base of the
		1) 63 4 4		plant along with split doses of
		\ \ \ (	L.	fertilizer.
		L AMBICTI ALS	4	Proper drainage is required to
		LAWNGTLAL	- 1	avoid water logging.
		SAIHA	#	Mulching with black polythene is
			₹.	found beneficial for both reducing
			٧	the weed and increasing the yield.
		7		
		- L		4   P a g e

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		Corm borer	4	Carbofuran 3G @1.5 kg a.i./ha
				applied in root zone when egg
				laying ooze is observed at plant
		/		base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
		remove all	4	Give irrigation at regular interval
		unwanted plant		Provide banana shading to
	\ \frac{1}{2}	from plot.	-	transplanted seedling.
	/	2. Provide split doses	4	Provide split doses of fertilizer @
	5	of fertilizer.		30kg/ha.
	)	5 4	4	Shallow rooted inter-row
				cultivation and hand weeding may
	1			be used to minimize weeds in the
	/ MAMIT	)		inter row zone.
	ζ	)		Black plastic mulch may be used
	\ \	AIZAWL CH	(AMP)	to suppress weed growth. The
	Ι			black plastic mulch also keeps the
	\	5		soil warm and encourages plant
	\ \			growth.
	) 6	1. Aphid (Aphis	•	Spray surf water solution to the
	\ \	gossypii)	1	plat
		SERCHHIP	7.	Spray any one of the insecticides
	1	SEROIIIII	I C	Imidacloprid 200 SL @ 0.25ml/lt of
	1	v 0		water (Sucking pest) or Dimethoate
			مام	30 % EC 7ml/10lt of water.
		2. Blister beetle	• )	Manual collection of insect and
			ζ	destroy it immediately.
	\	LUNGLEI	<b>F</b>	Apply cypermethrin 2 gm/lt of
	1			water.
		3. Flea beetle	•	Shake plants to dislodge grubs,
	`	(Phylliodes balyi)		pupae and adults and destroy.
			•	Spray any one of the insecticides
		190	)	Imidacloprid 200 SL @ 0.25ml/lt or
				Dimethoate 30 % EC 7ml/10lt of
				water.
		4 <mark>. Epilachna be</mark> etle.	`~\•	Collect damaged leaves with grubs
		(Epilachna		and egg masses and destroy them.
		viginctioctopancta	4	Spray with methyl parathion 0.5%
		ta)	الح	or dimethoate 0.3% is effective.
		5. Leafhopper	() •	Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of

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		devastans)		water (Sucking pest) or Dimethoate
		( Destarted With		30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt (Pseudomonas	•	Fields should be kept clean and
	1 /	solanacearum)		effected plants are to be uprooted and burnt.
	\ \	Solunacear any		Spray Copper fungicides to control
		KOLASIB		the disease (2% Bordeaux mixture.)
	ή.		•	The disease is more prevalent in
	/	~~ )		the presence of root knot
	)			Nematodes, so control of these
	1	2 5		nematodes will suppress the
				disease spread.
	} MAMIT	1	•	Soil drenching (Streptocycline
	(			sulphate 0.3 gm/lt of water) and Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage	AIZAWL CH	AMP/	Remove all unwanted leaves,
		5		branches and weed near to the
	\ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		plant.
	\		•	Earthing up the soil for better
	{ (		1	aeration.
	1 )		<i>&gt;</i>	Plant should be supported by
		SERCHHIP	(	bamboo or woods 20-25 days after
		Blister beetle	1.	sowing.  Manual collection of insect and
			싰	destroy it immediately.
		_	• \	Apply cypermethrin 2 gm/lt of
			5	water.
Brinjal	Vegetative \	LUNGLEI	)· 👍	Remove unwanted plant near base
	stage	~ (		of the plant and cut dead branches.
	,	10	4	Pre emergence application of
		1 (	_	Basalin @0.5 ml/lit of water for
			)	reduce grass type weed.
			4	Mulching with black polythene film
		1	L	reduces weed growth, increases the
		LAMBICTIALA	1.	crop growth.
		LAWNGTLAL	T	Split dose of fertilizer application @ 50kg/ha urea.
Tomato	Vegetative	V-1111A		Remove unwanted plant near base
	stage		Š	of the plant and cut dead
		100		branches.
				6   P a g e

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		I. Aphid(Aphis gossypii)	* * *	Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	A MAMIT	2. Epilachna beetle. <sub>CH</sub>	AMP/	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  Spray with methyl parathion 0.5% or dimethoate 0.3% is effective
Rice	Transplanting stage	viginctioctopancta ta) Kharif Rice	*	Land preparation is done by ploughing, harrowing, and levelling
		SERCHHIP	4	the field to make it suitable for crop establishment. Ploughing should be done 3-4 weeks prior to sowing. After ploughing, harrowing the field should be done twice, with one
		LUNGLEI	<u>.</u>	week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.
		Part 1	)	Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.
		LAWNGTLAI	\ S	Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage,
		7		7   Page

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	7	KOLASIB	involves an extra expense on seedlings. In case of transplanting with old seedlings, the number of seedlings per hill can be increased.  Remove the tip of rice seedling which reduces stem borer infestation.
Maize	Sowing stage	AIZAWL CH	<ul> <li>Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.</li> <li>Remove unwanted plant near base of the plant and cut dead branches.</li> <li>Earting up of soil along with fertilizer mixture.</li> <li>Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.</li> </ul>
Ginger and turmeric	Land preparation	LAWNGTLAI SAIHA	Remove unwanted plant near base of the plant and cut dead branches.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Earting up of soil along with fertilizer mixture.

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		Thrips	♣ Spray Roger or Monocrotophos (2.5
			ml/lt) for controlling thrips.
		Scales	Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
	) \		controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
	[	Respiratory	
	1	Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	)	(	vaccines at 2 months and yearly
		> 5	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
	₹	Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	\ \{	AIZAWL CH	Primary vaccination 6 month or
	)		above
	'i		Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	\		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Serchhip Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	3	3	3	10	42
Max Temp (oC)	29	30	32	33	30
Min Temp (oC)	20	20	20	21	21
Cloud Coverage	Partially clear	Mainly clear	Partially clear	Partially clear	Mainly cloudy
Max RH (%)	99	99	99	99	96
Min RH (%)	63	58	51	64	78
Wind Speed (KmpH)	2	2	2	2	4
*Wind Direction	S-E	E	E	E	S-E

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

STATUS OF PREMONSOON- May 1-31, 2015 (Percent of deviation from normal in parenthesis)

Aizawl- 383.68mm Champhai- 239.49mm Saiha- 109.52 mm Kolasib- 352.38mm
(341.8mm) (250.30mm) (87.2mm) (380.9mm)

Lawngtlai-321.51mm Lunglei-344.00mm Mamit-449.48mm Serchhip-411.72mm

(285.5mm) (186.21mm) (442.80mm) (25.9mm)

Weather summary of the past three days

Weather forecast valid from 24th June, 2015 To 28th

June, 2015.

There are chances of moderate to light rainfall during the next 5 day. The maximum and minimum temperatures for

next 5 day. The maximum and minimum temperatures for the next 5 days may range for 29-33°C and 20-21°C. Maximum relative humidity is expected in the range of 96-99% and minimum may from 51-78%. Wind direction would be northeasterly to southeasterly with the wind speed of 2-4 km per hour. Partially cloudy sky will prevail during the next five days.

		Weekly cumulative rainfall: 71.0 mm			
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories		
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAI	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K <sub>2</sub> O/plant and 4 g of P <sub>2</sub> O <sub>5</sub> /plant.		

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



			4	12 g Nitrogen and Potash/plant is
			_	recommended for first and second
				top dressing.
			4	Sucker and slips are usually
	7 1	5	_	preferred for planting.
	\_	( )	4	Potting mixture of soil, sand and
		KOLASIB	_	FYM or compost should be in
	(			proper ratio.
	)	W.	4	For nursery only certified seed
	(	3 4 /	_	should be used.
	(		4	Stagnation of water in beds should
	l í		_	be avoided.
			4	Seedling of uniform height should
	∑ MAMID		_	be selected for planting.
	/ 100-000	\ \ \ \ \ \	4	Plant protection measures should
	}	AIZAWL CI	HAMP	be apliked.
Khasi	Vegetative		4	Spray (10 ppm) of Gibberellic acid
Mandarin	stage			should be done at colour break
and acid lime	stage			stage to delay colour development,
and acid inne	\			maintain firmness, extend
	( (		1	harvesting period.
	1 /		- 4	Fruit drops, which occur at least
		SERCHHIP	17	twice in each crop, should be
		V- La	- >	controlled with the recommended
				doses of GA3, urea, benomyl and
				carbendazim at right time.
			*	Insect pests like Blackfly (Kolshi),
		LUNGLEI	4	Citrus Psylla, Leaf miner, Bark
	)	LUNGLEI	-	eating caterpillar, Fruit sucking
	\		/	Moth, Mites, Twing Blight,
	١		5	Gummosis, Root rot and Collar rot
			1	should be controlled.
			`\ <b>4</b>	Recommended fungicide
			1	(Carbendazium) and proper doses
		) 54 4	1	(0.1% or 1000 ppm) should be
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	L,	sprayed at proper time (One month
		LAWNGTLAL	1	and 15 days before harvest i.e. two
				sprays).
Oil plam	Vegetative/	SAIHA	+	Remove all dead plants and replace
	Harvesting		15	with healthy seedling.
	stage		<b>₩</b>	Cleaning near base of the plant
		7 3		2.15
		4		2   P a g e

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Mizoram Centre, Kolasib- 796081, MIZORAM

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



Banana	MAMIT Vegetative/	KOLASIB	and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/ harvesting	SERCHHIP	Cleaning near base of the plant and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease.  Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem weevil LAWNGTLAL SAIHA	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.
		17	3   P a g e

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			4	Application of over 100 g or neem
				oil was phytotoxic (harmful to plants) and uneconomical.
Passion Fruit	Nursery stage		4	When two to three leaves develop,
1 4551011 1 1411	manual pungs	1		seedling should be transplanted in
	\ \	X )		polythene bags.
		KOLASIB	4	The seedlings are planted in field
	{	II. (Y	-	when they become 3-4 months old.
	/	W )	4	Mature 30-35 cm long stem with 3
	>	2		nodes of pencil thickness should
	}	5 4		be planted in nursery
				beds/polythene bags having
				suitable potting media.
	/ MAMIT	\ )	4	Apply well decompose FYM @
	ς	AIZAWL CH	AMP/	15kg/pit/year along with
		ALANIE OII		100.50.100 g NPK per pit.
Pineapple	Flowering		+	Apply flowering inducing chemical
	stage	~ ~ 7		(Ethrel 10 PPM+2% urea+0.04%
	\			Sodium Carbonate) should be
	-	$\sim$	- N	applied in the heart of the plant. In
	) )		- )	evening and only when plants have
		SERCHHIP	14	at least 32 leaves. The flowering emergence will come
		V L	<b>\</b>	out after 55-60 days after chemical
				spraying.
				Apply split doses of fertilizer @ 60:
			-	50:60 g per plant.
		LUNGLEI	À 4	Remove all unwanted leaves,
	>	LOTTOLLI	_	branches and weed near to the
	1	~ (		plant.
Colocasia	Vegetative		4	Remove unwanted plant near base
	stage			of the plant and cut dead
			١	branches.
			-	Earthing up soil at base of the
			\	plant along with split doses of
			5.	fertilizer.
		LAWNGTLAJ	-	Proper drainage is required to
		SAIHA	<u> </u>	avoid water logging.
			J	Mulching with black polythene is found beneficial for both reducing
			3	the weed and increasing the yield.
		2		the weed and mercasing the yield.
		7, 7		4   P a g e

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		Corm borer	4	Carbofuran 3G @1.5 kg a.i./ha
				applied in root zone when egg
				laying ooze is observed at plant
				base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
	- L	remove all	4	Give irrigation at regular interval
		unwanted plant		Provide banana shading to
	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	from plot.		transplanted seedling.
	/	2. Provide split doses	4	Provide split doses of fertilizer @
	)	of fertilizer.		30kg/ha.
	}	> 5	+	Shallow rooted inter-row
				cultivation and hand weeding may
	₹	4		be used to minimize weeds in the
	/ MAMIT	\ \		inter row zone.
	5	AIZAWL CH	AMP	Black plastic mulch may be used
	)	3		to suppress weed growth. The
	l 'i	1		black plastic mulch also keeps the
	λ.	~ /		soil warm and encourages plant
	1			growth.
	} (	1. Aphid (Aphis	\•	Spray surf water solution to the
	) )	gossypii)		plat
	( ) ( ) ( ) ( ) ( ) ( )	SERCHHIP	1.	Spray any one of the insecticides
	ì	V~ \	3	Imidacloprid 200 SL @ 0.25ml/lt of
	<u> </u>		1	water (Sucking pest) or Dimethoate
			حلم	30 % EC 7ml/10lt of water.
	ļ ļ	2. Blister beetle	• ,	Manual collection of insect and
			5	destroy it immediately.
	\	LUNGLEI	F •	Apply cypermethrin 2 gm/lt of
	(	O Dies heati		water.
		3. Flea beetle	•	Shake plants to dislodge grubs,
		(Phylliodes balyi)		pupae and adults and destroy.
			•	Spray any one of the insecticides
			)	Imidacloprid 200 SL @ 0.25ml/lt or
		1 63 9		Dimethoate 30 % EC 7ml/10lt of
		4 Enilophya hantla	<u>L.</u>	water.
		4. Epilachna beetle.	1	Collect damaged leaves with grubs
		(Epilachna viginctioctopancta		and egg masses and destroy them.
		ta)	1	Spray with methyl parathion 0.5%
			7	or dimethoate 0.3% is effective.
		5. Leafhopper	$\circ$	Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of
		4		5   P a g e

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		deva <mark>sta</mark> ns)		water (Sucking pest) or Dimethoate
				30 % EC 7ml/10lt of water.
		✓ Bacterial Wilt	•	Fields should be kept clean and
	1 1	(Pseudomonas		effected plants are to be uprooted
	\	solanacearum)		and burnt.
	"	KOLASIB	•	Spray Copper fungicides to control
	l l	7	-	the disease (2% Bordeaux mixture.)
	)	W.	•	The disease is more prevalent in
	(	3 1 /		the presence of root knot
	(			Nematodes, so control of these
	[			nematodes will suppress the
	J			disease spread.
	MAMIT	1	•	Soil drenching (Streptocycline
		1		sulphate 0.3 gm/lt of water) and
French bean	Flowering stage	AIZAWL CH	AMP:	Blitox 50 @ 5gm/ 15lt water.  Remove all unwanted leaves,
Fichen bean	Flowering stage	6	•	branches and weed near to the
	\	5		plant.
	\			Earthing up the soil for better
	) (		-	aeration.
	) )		<b>\</b>	Plant should be supported by
	£	_SERCHHIP		bamboo or woods 20-25 days after
	1		Ν,	sowing.
		Blister beetle	•	Manual collection of insect and
				destroy it immediately.
		-	• `	Apply cypermethrin 2 gm/lt of
			S.	water.
Brinjal	Vegetative \	LUNGLEI	+	Remove unwanted plant near base
	stage	_ /		of the plant and cut dead
	,	10		branches.
			-	Pre emergence application of
				Basalin @0.5 ml/lit of water for
			4	reduce grass type weed.  Mulching with black polythene film
			\	reduces weed growth, increases the
			4	crop growth.
		LAWNGTLAL	4	Split dose of fertilizer application @
		SAIHA		50kg/ha urea.
Tomato	Vegetative		-4	Remove unwanted plant near base
	stage		S	of the plant and cut dead
		100		branches.
		7. 7.		6   P a g e

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Mizoram Centre, Kolasib- 796081, MIZORAM

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	7	KOLASIB	+ + +	Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @
	MAMIT	1. Aphid(Aphis gossypii)	•	Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.
	1	2. Epilachna beetle. <sub>CH</sub> (Epilachna viginctioctopancta ta)	AMP/	Spray with methyl parathion 0.5% or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting stage	Kharif Rice  SERCHHIP  LUNGLEI  LAWNGTLAI SAIHA	* * * * * * * * * * * * * * * * * * * *	Land preparation is done by ploughing, harrowing, and levelling the field to make it suitable for crop establishment.  Ploughing should be done 3-4 weeks prior to sowing.  After ploughing, harrowing the field should be done twice, with one week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.  Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.  Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage,
		7 7. 7		7   P a g e

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	5	KOLASIB	involves an extra expense on seedlings. In case of transplanting with old seedlings, the number of seedlings per hill can be increased.  Remove the tip of rice seedling which reduces stem borer infestation.
Maize	Sowing stage	AIZAWL CH	<ul> <li>♣ Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.</li> <li>♣ Remove unwanted plant near base of the plant and cut dead branches.</li> <li>♣ Earting up of soil along with fertilizer mixture.</li> <li>♣ Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.</li> </ul>
Ginger and turmeric	Land preparation	LAWNGTLAI SAIHA	Remove unwanted plant near base of the plant and cut dead branches.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Earting up of soil along with fertilizer mixture.

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		Thrips	♣ Spray Roger or Monocrotophos (2.5
			ml/lt) for controlling thrips.
		Scales	Spray Quinalphos or
	( )	1	Monocrotophos (2.5 ml/lt) for
	) \	-/	controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
		Respiratory	
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	)		vaccines at 2 months and yearly
	}	> 5	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
	₹	Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	<u> </u>	AIZAWL CH	Primary vaccination 6 month or
	)	3	above
	)		Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	\		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



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Mizoram Centre, Kolasib- 796081, MIZORAM

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



District: Aizawl Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	8	7	7	13	24
Max Temp (oC)	29	30	33	33	32
Min Temp (oC)	20	21	21	21	21
Cloud Coverage	Partially clear	Mainly clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	97	96	96	98	95
Min RH (%)	69	61	50	61	71
Wind Speed (KmpH)	4	3	2	3	5
*Wind Direction	S-E	S-E	E	E	S-E
No	rtherly- N. North	-Easterly- N-E. Ea	sterly- E. South-I	Casterly- 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 PREMONSOON- May 1-31, 2015 (Percent of deviation from normal in parenthesis)								
Aizawl- 383.68mm	Champhai- 239.49mm	Saiha- 109.52 mm	Kolasib- 352.38mm					
(341.8mm)	(250.30mm)	(87.2mm)	(380.9mm)					
Lawngtlai-321.51mm	Lunglei-344.00mm	<b>Mamit-449.48mm</b>	Serchhip-411.72mm					
(285 5mm)	(186 21mm)	(442 80mm)	(25 9mm)					

past three days	June, 2015.
	There are chances of moderate to light and heavy rainfall rainfall
	during the next 5 day. The maximum and minimum temperatures
	for the next 5 days may range for 29-33°C and 20-21°C.
	Maximum relative humidity is expected in the range of 95-97%
	and minimum may from 50-71%. Wind direction would be
	southeasterly with the wind speed of 2-5 km per hour. Dense
	cloudy sky will prevail during the next five days.

Weather forecast valid from 24th June, 2015 To 28th

		Weekly cumulative rainfall: 59.0 mm			
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories		
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAI	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K <sub>2</sub> O/plant and 4 g of P <sub>2</sub> O <sub>5</sub> /plant.  12 g Nitrogen and Potash/plant is recommended for first and second		

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Weather summary of the



### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



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Khasi	MAMIT	KOLASIB	* * * * * * *	top dressing. Sucker and slips are usually preferred for planting. Potting mixture of soil, sand and FYM or compost should be in proper ratio. For nursery only certified seed should be used. Stagnation of water in beds should be avoided. Seedling of uniform height should be selected for planting. Plant protection measures should be apliked. Spray (10 ppm) of Gibberellic acid
Mandarin and acid lime	stage	SERCHHIP	AMPA	should be done at colour break stage to delay colour development, maintain firmness, extend harvesting period. Fruit drops, which occur at least twice in each crop, should be controlled with the recommended doses of GA3, urea, benomyl and carbendazim at right time. Insect pests like Blackfly (Kolshi), Citrus Psylla, Leaf miner, Bark eating caterpillar, Fruit sucking Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot should be controlled. Recommended fungicide (Carbendazium) and proper doses (0.1% or 1000 ppm) should be sprayed at proper time (One month and 15 days before harvest i.e. two sprays).
Oil plam	Vegetative/ Harvesting stage	LAWNGTLAI	) <del> </del> 	Remove all dead plants and replace with healthy seedling. Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer

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Banana	Vegetative	KOLASIE		+	600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/ harvesting	LUNGLEI	SERCHHIP		Cleaning near base of the plant and cut unwanted branches. Application of split dose of fertilizer 600: 200:100 (g/pt). Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard. Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease. Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil stem weevil	7 {	1	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.  Application of over 100 g or neem oil was phytotoxic (harmful to

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				plants) and uneconomical.
<b>Passion Fruit</b>	Nursery stage		4	When two to three leaves develop,
				seedling should be transplanted in
		/		polythene bags.
	) (	2	4	The seedlings are planted in field
	L.	· · · · · · · · · · · · · · · · · · ·		when they become 3-4 months old.
		KOLASIB	4	Mature 30-35 cm long stem with 3
	\			nodes of pencil thickness should
	/	W \		be planted in nursery
	· · · · · · · · · · · · · · · · · · ·			beds/polythene bags having
	}	> -		suitable potting media.
			4	Apply well decompose FYM @
	<b>{</b>			15kg/pit/year along with
	/ MAMIT			100.50.100 g NPK per pit.
Pineapple	Flowering	AIZAWL CH	IAMP	Apply flowering inducing chemical
	stage			(Ethrel 10 PPM+2% urea+0.04%
	ì			Sodium Carbonate) should be
	· l			applied in the heart of the plant. In
	1			evening and only when plants have
	- (	~ / / ~		at least 32 leaves.
	))		<i> </i>	The flowering emergence will come out after 55-60 days after chemical
	-	SERCHHIP	l/	spraying.
			$  \rangle_{\perp}$	Apply split doses of fertilizer @ 60:
				50:60 g per plant.
			17/2	Remove all unwanted leaves,
		_	h	branches and weed near to the
		LUNGLEI	7	plant.
Colocasia	Vegetative 🔪		4	Remove unwanted plant near base
	stage	6 1		of the plant and cut dead
	,			branches.
		[ ]	+	Earthing up soil at base of the
			<b>%</b>	plant along with split doses of
			l .	fertilizer.
			ነ 🐣	Proper drainage is required to
			<b>S</b>	avoid water logging.
		LAWNGTLAL		Mulching with black polythene is
		SAIHA	\	found beneficial for both reducing
		Corm borer		the weed and increasing the yield.
		Corm borer	Ů,	Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg
		2		applied in root zolle when egg

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				laying ooze is observed at plant
Okra	Flowering stage	1. Clean cultivation or	4	base.  Mulching (if dry spell is there)
		remove all		Give irrigation at regular interval
	7 1	_unwanted plant	4	Provide banana shading to
	L	from plot.		transplanted seedling.
		2. Provide split doses	4	Provide split doses of fertilizer @
	\ \frac{1}{2}	of fertilizer.		30kg/ha.
	/	W >	4	Shallow rooted inter-row
	>			cultivation and hand weeding may
	}			be used to minimize weeds in the
				inter row zone.
	{		4	Black plastic mulch may be used
	/ MAMIT	( )		to suppress weed growth. The
	5	AIZAWL CH	AMP	black plastic mulch also keeps the
	)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		soil warm and encourages plant
				growth.
	).	1. Aphid (Aphis	•	Spray surf water solution to the
	\	gossypii)		plat
	1 1	$\sim$	\•	Spray any one of the insecticides
	) )			Imidacloprid 200 SL @ 0.25ml/lt of
	S	SERCHHIP	1	water (Sucking pest) or Dimethoate
			<u>}</u>	30 % EC 7ml/10lt of water.
	1	2. Blister beetle	•	Manual collection of insect and
			$M_{\odot}$	destroy it immediately.
			•	Apply cypermethrin 2 gm/lt of water.
		3. Flea beetle	P .	Shake plants to dislodge grubs,
		(Phylliodes balyi)	ſ	pupae and adults and destroy.
	l l		•	Spray any one of the insecticides
	1	10		Imidacloprid 200 SL @ 0.25ml/lt or
				Dimethoate 30 % EC 7ml/10lt of
			<u> </u>	water.
		4. Epilachna beetle.	•	Collect damaged leaves with grubs
		(Epilachna	)	and egg masses and destroy them.
		viginctioctopancta	-10	Spray with methyl parathion 0.5%
		ta) NNGTLAL		or dimethoate 0.3% is effective.
		<ol><li>Leafhopper SAIHA</li></ol>	•	Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of
		<mark>devastan</mark> s)	Ü	water (Sucking pest) or Dimethoate
		D 1		30 % EC 7ml/10lt of water.
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		Bacterial Wilt (Pseudomonas solanacearum)  KOLASIB	<ul> <li>Fields should be kept clean and effected plants are to be uprooted and burnt.</li> <li>Spray Copper fungicides to control the disease (2% Bordeaux mixture.)</li> <li>The disease is more prevalent in the presence of root knot Nematodes, so control of these nematodes will suppress the disease spread.</li> <li>Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and Blitox 50 @ 5gm/ 15lt water.</li> </ul>
French bean	Flowering stage		<ul> <li>Remove all unwanted leaves, branches and weed near to the plant.</li> <li>Earthing up the soil for better aeration.</li> <li>Plant should be supported by bamboo or woods 20-25 days after sowing.</li> </ul>
		Blister beetlehhip	<ul> <li>Manual collection of insect and destroy it immediately.</li> <li>Apply cypermethrin 2 gm/lt of water.</li> </ul>
Brinjal	Vegetative stage	LUNGLEI	<ul> <li>Remove unwanted plant near base of the plant and cut dead branches.</li> <li>Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.</li> <li>Mulching with black polythene film reduces weed growth, increases the crop growth.</li> <li>Split dose of fertilizer application @ 50kg/ha urea.</li> </ul>
Tomato	Vegetative stage	LAWNGTLAI	Remove unwanted plant near base of the plant and cut dead branches.  Pre emergence application of Basalin @0.5 ml/lit of water for

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			reduce grass type weed.
			♣ Mulching with black polythene film
			reduces weed growth, increases the
		/	crop growth.
	) \	3	♣ Split dose of fertilizer application @
	\	A KOLBON	50kg/ha urea.
		1. Aphid(Aphis	• Spray surf water solution to the
	)	gossypii)	plat.
	(	3 4 /	• Spray any one of the insecticides
		(	Imidacloprid 200 SL @ 0.25ml/lt of
		2 5	water (Sucking pest) or Dimethoate
		O Pallachus basilla	30 % EC 7ml/10lt of water.
	MAMIT	2. Epilachna beetle.	• Spray with methyl parathion 0.5%
		(Dpttacrtra	or dimethoate 0.3% is effective
	3	viginctioctopancta ta)	AMPA against flea beetle.
Rice	Transplanting	Kharif Rice	
	stage		ploughing, harrowing, and levelling
	3.1.3		the field to make it suitable for
	) n		crop establishment.
	) )		▶ Ploughing should be done 3-4
		SERCHHIP	weeks prior to sowing.
	1	V~	♣ After ploughing, harrowing the field
	1		should be done twice, with one
			week gap between the two. First
		_	harrowing should be done after 1
			week of ploughing. The second
	\	LUNGLEI	harrowing should be done across
	(	,	the first harrowing.
	\	· ~	Under good management and adequate nitrogen levels, the
		A A	optimum spacing for rice varieties
			should be around 20x15 cms both
			for kharif and rabi crops.
		1 6 9	Transplanting two to three
		V (	seedlings per hill under normal
		LAWNIGHT	conditions is enough. The use of
		LAWNGTLAL	more seedlings per hill, besides not
		SAIHA	being any additional advantage,
			involves an extra expense on
			seedlings. In case of transplanting
			71D
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			+	with old seedlings, the number of seedlings per hill can be increased. Remove the tip of rice seedling which reduces stem borer
Maize	Sowing stage	KOLASIB	4	infestation.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim
	}			500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for
	MAMIT	AIZAWL CH	la M <b>.P</b>	control of many annual and broad leaved weeds. Remove unwanted plant near base
	\		4	of the plant and cut dead branches.  Earting up of soil along with
	35	SERCHHIP	7	fertilizer mixture. Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.
Ginger and turmeric	Land preparation		*	Remove unwanted plant near base of the plant and cut dead branches.
	1	LUNGLEI		Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor
				(Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.
		SAIHA	+	Earting up of soil along with fertilizer mixture.
		Thrips	7	Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
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		Scales	♣ Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
			controlling scales.
Pig	All stages	Porcine Reproductive	<ol> <li>Culling of positive pigs or piglets.</li> </ol>
	) \	Respiratory (	
	-	Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	1		vaccines at 2 months and yearly
	/	W \	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
	}	Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	₹		Primary vaccination 6 month or
	/ MAMIT	( )	above
	5	AIZAWI CH	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	)		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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District: Champhai Period: 24 - 28 June, 2015

Bulletin No: -529/2015/ Bulletin/English

Date of issue: 23th June, 2015

Parameters	24.06.2015	25.06.2015	26.06.2015	27.06.2015	28.06.2015
Rainfall (mm)	3	5	6	16	35
Max Temp (oC)	28	30	33	31	31
Min Temp (oC)	20	21	21	22	21
Cloud Coverage	Partially clear	Mainly clear	Partially clear	Mainly cloudy	Mainly cloudy
Max RH (%)	98	96	97	98	97
Min RH (%)	67	60	54	66	75
Wind Speed (KmpH)	3	2	2	2	4
*Wind Direction	S	S-E	E	E	S-E

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

(341.8mm) (250.30mm) (87.2mm) (380.9mm) Lawngtlai-321.51mm Lunglei-344.00mm Mamit-449.48mm Serchhip-411.72mm

(285.5mm) (186.21mm) (442.80mm) (25.9mm)

Weather summary of the past three days

Weather forecast valid from 24th June, 2015 To 28th

June, 2015.

There are chances of moderate to light and heavy rainfall during the past 5 day. The maximum and minimum

during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 28-33°C and 20-22°C. Maximum relative humidity is expected in the range of 96-98% and minimum may from 54-75%. Wind direction would be Northeasterly to southeasterly with the wind speed of 2-4 km per hour. Dense cloudy sky will prevail during the next five days.

		Weekly cumulative rainfall: 65.0 mm			
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories		
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAI	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K <sub>2</sub> O/plant and 4 g of P <sub>2</sub> O <sub>5</sub> /plant.		

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		1	+	12 g Nitrogen and Potash/plant is recommended for first and second top dressing.
		3	+	Sucker and slips are usually
	\	X 5	4	preferred for planting. Potting mixture of soil, sand and
		KOLASIB		FYM or compost should be in
	'n	- C		proper ratio.
	(	"3 A /	-	For nursery only certified seed should be used.
	<i>f</i>		4	Stagnation of water in beds should
				be avoided.
	<b>₹</b>		+	Seedling of uniform height should
	/ MAMIT		4	be selected for planting. Plant protection measures should
	3	AIZAWL CH	(AMP)	be apliked.
Khasi	Vegetative	5	+	Spray (10 ppm) of Gibberellic acid
Mandarin	stage	1 ~ 7		should be done at colour break
and acid lime	\	( ) J		stage to delay colour development, maintain firmness, extend
	{ (			harvesting period.
		SERCHHIP	/4	Fruit drops, which occur at least
	[	SERCITION .	K	twice in each crop, should be
	1			controlled with the recommended
	]			doses of GA3, urea, benomyl and carbendazim at right time.
			<b>*</b>	Insect pests like Blackfly (Kolshi),
		LUNGLEI	4	Citrus Psylla, Leaf miner, Bark
	}			eating caterpillar, Fruit sucking
	\	5~		Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot
		NA 1		should be controlled.
			\ <b>+</b>	Recommended fungicide
			V .	(Carbendazium) and proper doses
		1 2	)	(0.1% or 1000 ppm) should be sprayed at proper time (One month
				and 15 days before harvest i.e. two
		LAWNGTLAL		sprays).
Oil plam	Vegetative/	SAIHA	+	Remove all dead plants and replace
	Harvesting stage	-	5-	with healthy seedling. Cleaning near base of the plant
	stage	2	-	Cicaring near base of the plant
		1 4 7		2   P a g e

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Pomomo	MAMIT	KOLASIB	and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Fruits are harvested when they attain full size, develop attractive colour with optimum sugar and acid blend.
Banana	Vegetative/ harvesting	SERCHHIP	Cleaning near base of the plant and cut unwanted branches.  Application of split dose of fertilizer 600: 200:100 (g/pt).  Apply micro-nutrients viz. zinc, copper, manganese, iron, boron and molybdenum are required in ample quantities for supplying nutrients and also reduce serious disorders which may lead to decline of the whole orchard.  Pruning on a regular basis removes unwanted or a sucker, keep production mats in optimum condition, saves fertilizer, reduces pest and disease.  Fruits are harvested when they attain full size, develop attractive yellow colour.
		Comb weevil and stem weevil LAWNGTLAL SAIHA	Applications of neem powder effectively controlled weevils.  Application of 60 to 100 g of neem seed powder or neem cake at planting and then at 4 months intervals significantly diminished pest damage and increased yields.
			3   P a g e

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			4	Application of over 100 g or neem oil was phytotoxic (harmful to
				plants) and uneconomical.
Passion Fruit	Nursery stage	7	•	When two to three leaves develop,
	) \	5		seedling should be transplanted in
	"	KOLASIB		polythene bags.
	- 1	KOLAGID	*	The seedlings are planted in field
	1	10		when they become 3-4 months old.
	(	"3 a /	•	Mature 30-35 cm long stem with 3
	7			nodes of pencil thickness should
	1	7 5		be planted in nursery
				beds/polythene bags having
	· · · · · · · · · · · · · · · · · · ·			suitable potting media.
	/ MAMIT		•	Apply well decompose FYM @
	- \{	AIZAWL CHA	AMP/	15kg/pit/year along with
			-	100.50.100 g NPK per pit.
Pineapple	Flowering	1	-	Apply flowering inducing chemical
	stage			(Ethrel 10 PPM+2% urea+0.04%
	1			Sodium Carbonate) should be
	- { (		N	applied in the heart of the plant. In
	) )		-)	evening and only when plants have
	Same Same	SERCHHIP	ſ.,	at least 32 leaves.
	)	V~ \	`\*	The flowering emergence will come
	(	Į		out after 55-60 days after chemical
			da.	spraying.
		~	<b>*</b>	Apply split doses of fertilizer @ 60:
			S.	50:60 g per plant.  Remove all unwanted leaves,
	/	LUNGLEI	_	branches and weed near to the
	(	/		plant.
Colocasia	Vegetative	. 2	4	Remove unwanted plant near base
Colocasia	stage	111	_	of the plant and cut dead
	Stuge			branches.
			4	Earthing up soil at base of the
		1 6 3 3 4		plant along with split doses of
		( )		fertilizer.
			4	Proper drainage is required to
		LAWNGTLAL		avoid water logging.
		/ SAIHA	4	Mulching with black polythene is
			4	found beneficial for both reducing
			۲	the weed and increasing the yield.
		4 1		
		V V /		4   P a g e

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		Corm borer	4	Carbofuran 3G @1.5 kg a.i./ha
				applied in root zone when egg
	-			laying ooze is observed at plant
		/		base.
Okra	Flowering stage	1. Clean cultivation or	4	Mulching (if dry spell is there)
	'-	remove all	+	Give irrigation at regular interval
		unwanted plant	+	Provide banana shading to
	)	from plot.		transplanted seedling.
	(	2. Provide split doses	-	Provide split doses of fertilizer @
	7	of fertilizer.		30kg/ha.
	1	2 5	-	Shallow rooted inter-row
				cultivation and hand weeding may
				be used to minimize weeds in the
	/ MAMIT	\ \ \ (		inter row zone.
	\ \ \	AIZAWL CH	AMP	Black plastic mulch may be used
	ì			to suppress weed growth. The black plastic mulch also keeps the
	l l			soil warm and encourages plant
	λ,			growth.
		1. Aphid (Aphis		Spray surf water solution to the
	{ (	gossypii)	1	plat
	1/		7.	Spray any one of the insecticides
		SERCHHIP	I(	Imidacloprid 200 SL @ 0.25ml/lt of
		V	17	water (Sucking pest) or Dimethoate
			20	30 % EC 7ml/10lt of water.
		2. Blister beetle	• )	Manual collection of insect and
			R	destroy it immediately.
		LUNGLEI	<b>F</b>	Apply cypermethrin 2 gm/lt of
	}			water.
	l l	3. Flea beetle	•	Shake plants to dislodge grubs,
		(Phylliodes balyi)		pupae and adults and destroy.
			•	Spray any one of the insecticides
		) 7 ()	)	Imidacloprid 200 SL @ 0.25ml/lt or
		( ( ) 3 )	(	Dimethoate 30 % EC 7ml/10lt of
		4 Duile share to 41	L	water.
		4. Epilachna beetle.	•	Collect damaged leaves with grubs
		viginctioetopaneta		and egg masses and destroy them.
		ta)	Ī	Spray with methyl parathion 0.5% or dimethod to 0.2% is effective
		5. Leafhopper	1	or dimethoate 0.3% is effective.
		(Empoasca	$\circ$	Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
		Entpoused		<u> </u>
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		deva <mark>sta</mark> ns)		water (Sucking pest) or Dimethoate
		✓ Bacterial Wilt		30 % EC 7ml/10lt of water.
		(Pseudomonas	•	Fields should be kept clean and effected plants are to be uprooted
	7 1	solanacearum)		and burnt.
	\ \_	/Y '/		Spray Copper fungicides to control
		KOLASIB		the disease (2% Bordeaux mixture.)
	\ \ \		•	The disease is more prevalent in
	/	~~ )		the presence of root knot
	7			Nematodes, so control of these
	/	2 5		nematodes will suppress the
	J			disease spread.
	A MAMIT	1	•	Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and
	ζ	AIZAWII CH	ΔМР	Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage	AIZAWI GH	A.M.P.	Remove all unwanted leaves,
		9		branches and weed near to the
	λ.	1 ~ 7		plant.
	\		•	Earthing up the soil for better
	{ (		1	aeration.
	1.7	05000000	·	Plant should be supported by
		SERCHHIP		bamboo or woods 20-25 days after sowing.
		Blister beetle	•	Manual collection of insect and
				destroy it immediately.
		_	. • `	Apply cypermethrin 2 gm/lt of
			5	water.
Brinjal	Vegetative \	LUNGLEI	+	Remove unwanted plant near base
	stage	a (		of the plant and cut dead branches.
	,		4	Pre emergence application of
			-	Basalin @0.5 ml/lit of water for
			)	reduce grass type weed.
		1 6 9	+	Mulching with black polythene film
		V	L,	reduces weed growth, increases the
		LAWNGTLAL	4	crop growth.  Split dose of fertilizer application @
		SAIHA		50kg/ha urea.
Tomato	Vegetative		-4	Remove unwanted plant near base
	stage		Ù	of the plant and cut dead
				branches.
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		I. Aphid(Aphis gossypii)	* *	Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene film reduces weed growth, increases the crop growth.  Split dose of fertilizer application @50kg/ha urea.  Spray surf water solution to the plat.  Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	MAMIT	2. Epilachna beetle. <sub>CH</sub>	AMP/	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  Spray with methyl parathion 0.5% or dimethoate 0.3% is effective
Rice	Transplanting stage	viginctioctopancta ta) Kharif Rice	#	against flea beetle.  Land preparation is done by ploughing, harrowing, and levelling
	Stage	SERCHHIP	4	the field to make it suitable for crop establishment. Ploughing should be done 3-4 weeks prior to sowing. After ploughing, harrowing the field should be done twice, with one
		LUNGLEI		week gap between the two. First harrowing should be done after 1 week of ploughing. The second harrowing should be done across the first harrowing.
		May !	)	Under good management and adequate nitrogen levels, the optimum spacing for rice varieties should be around 20x15 cms both for kharif and rabi crops.
		LAWNGTLAL	5	Transplanting two to three seedlings per hill under normal conditions is enough. The use of more seedlings per hill, besides not being any additional advantage,
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	7	KOLASIB	involves an extra expense on seedlings. In case of transplanting with old seedlings, the number of seedlings per hill can be increased.  Remove the tip of rice seedling which reduces stem borer infestation.
Maize	Sowing stage	AIZAWL CH	<ul> <li>Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.</li> <li>Remove unwanted plant near base of the plant and cut dead branches.</li> <li>Earting up of soil along with fertilizer mixture.</li> <li>Foliar spray of 0.1 % Endosulfan {2 ml (35 EC) in litre water} at 30 days after germination is very effective against stem borer.</li> </ul>
Ginger and turmeric	Land preparation	LAWNGTLAI SAIHA	Remove unwanted plant near base of the plant and cut dead branches.  Pre-emergence application of Atrazine (Atratraf 50 wp, Gesaprim 500 fw) @ of 1.0-1.5 kg a.i ha-1in 600 litre water, Alachlor (Lasso) @ 2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds.  Earting up of soil along with fertilizer mixture.

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		Thrips	♣ Spray Roger or Monocrotophos (2.5
			ml/lt) for controlling thrips.
		Scales	Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
	) \		controlling scales.
Pig	All stages	Porcine Reproductive	1. Culling of positive pigs or piglets.
		Respiratory	
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	)	(	vaccines at 2 months and yearly
	}	> 5	interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and
	₹	Disease (FMD)	repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	<u> </u>	AIZAWL CH	Primary vaccination 6 month or
	)		above
	)		Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	\		and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat



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