

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: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
Rainfall (mm)	10	15	6	15	6
Max Temp (oC)	32	32	32	31	31
Min Temp (oC)	22	23	23	22	22
Cloud Coverage	Mainly cloudy	Partially clear	Mainly cloudy	Partially clear	Mainly cloudy
Max RH (%)	97	98	97	99	97
Min RH (%)	64	78	71	76	63
Wind Speed (KmpH)	2	3	2	4	3
*Wind Direction	E	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- 383.68mm

Champhai- 239.49mm

Saiha- 109.52 mm

Kolasib- 352.38mm

(341.8mm)

(250.30mm)

(87.2mm)

(380.9mm) Serchhip-411.72mm

Lawngtlai-321.51mm (285.5mm)

Lunglei-344.00mm (186.21mm)

Mamit-449.48mm (442.80mm)

(25.9mm)

Weather summary of the past three days

Weather forecast valid from 20th June, 2015 To 24th June, 2015.

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

The temperature range for maximum and minimum were 27.4-30.8°C and 20.6-22.5°C respectively. Dense cloudy sky was observed. Wind direction is southeasterly. Maximum RH observed 84-92% & minimum of 60-62%. Rainfall recorded for the past three days is **56 20mm**

There are chances of moderate to light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 31-32°C and 22-23°C. Maximum relative humidity is expected in the range of 97-99% and minimum may from 63-78%. Wind direction would be southeasterly with the wind speed of 2-4 km per hour. Dense cloudy sky will prevail during the next five days.

past three days is 56.20mm. Weekly cumulative rainfall: 52.0 mm

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

Animal /Fisheries	Stage	Pest/ Diseases
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 $K_2O/plant$ and 4 g of $P_2O_5/plant$.

husbandry advisories

12 g Nitrogen and Potash/plant is recommended for first and second

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2 | P a g e

			_	top dressing.
			-	Sucker and slips are usually
				preferred for planting.
		7	4	Potting mixture of soil, sand and
) \	2		FYM or compost should be in
	<u></u>	^		proper ratio.
		KOLASIB	4	For nursery only certified seed
	1		_	should be used.
	/	W >	4	Stagnation of water in beds should
	· · · · · · · · · · · · · · · · · · ·			be avoided.
)	5 6	4	Seedling of uniform height should
				be selected for planting.
	1		4	Plant protection measures should
	/ MAMIT			be apliked.
Khasi	Vegetative	AIZAWL C	наме	Spray (10 ppm) of Gibberellic acid
Mandarin	stage	NIEATTE O	I III-XIIIII /	should be done at colour break
and acid lime	\ \	5		stage to delay colour development,
	\	1 2		maintain firmness, extend
	1			harvesting period.
) (+ +	Fruit drops, which occur at least
))			twice in each crop, should be
		SERCHHIE	1	controlled with the recommended
		(~-)	15	doses of GA3, urea, benomyl and
		·	1 (carbendazim at right time.
		_	- A	Insect pests like Blackfly (Kolshi),
		_		_Citrus Psylla, Leaf miner, Bark
			R	eating caterpillar, Fruit sucking
		LUNGLEI	12	Moth, Mites, Twing Blight,
	· · · · · · · · · · · · · · · · · · ·			Gummosis, Root rot and Collar rot
	1		1	should be controlled.
	4	10) 🔸	Recommended fungicide
		131	:	(Carbendazium) and proper doses
			N.	(0.1% or 1000 ppm) should be
		2	7	sprayed at proper time (One month
) 4	1	and 15 days before harvest i.e. two
		Y I		sprays).
Oil plam	Vegetative/	LAWNGTLAL	4	Remove all dead plants and replace
	Harvesting	SAIHA	1 1	with healthy seedling.
	stage	(SAIHA	+	Cleaning near base of the plant
			45	and cut unwanted branches.
			\vee	Application of split dose of fertilizer
		6 7		

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		KOLASIB	+	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	SERCHHIE	HAM [†]	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.
	ste	mb weevil and m weevil	2	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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4 | P a g e

				plants) and uneconomical.
Passion Fruit	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 @
	{	(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
			١.	plant along with split doses of
		2 1 3 3	/ .	fertilizer.
			ነ 🐣	Proper drainage is required to
			S	avoid water logging.
		LAWNGTLAL		Mulching with black polythene is
		SAIHA	\	found beneficial for both reducing
		Corm borer		the weed and increasing the yield.
		Corm porer	₩.	Carbofuran 3G @1.5 kg a.i./ha
		7		applied in root zone when egg

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				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
	7 (_unwanted plant	4	Provide banana shading to
	L .	from plot.		transplanted seedling.
		2. Provide split doses		Provide split doses of fertilizer @
	\ \	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
	<u> </u>	AIZAWL CH	AMPA	black plastic mulch also keeps the
)	ALEATTE OIL	estrine e	soil warm and encourages plant
	\	j		growth.
	λ.	1. Aphid (<i>Aphis</i>	•	Spray surf water solution to the
	1	gossypii)		plat
	} (\sim	₹	Spray any one of the insecticides
))			Imidacloprid 200 SL @ 0.25ml/lt of
		SERCHHIP	1	water (Sucking pest) or Dimethoate
			\	30 % EC 7ml/10lt of water.
	(2. Blister beetle	•	Manual collection of insect and
]		\wedge	destroy it immediately.
		_	• ,	Apply cypermethrin 2 gm/lt of
		2 IDING1-E141	100	water.
	<u> </u>	3. Flea beetle	•	Shake plants to dislodge grubs,
	\	(Phylliodes balyi)		pupae and adults and destroy.
	l,		•	Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt or
		11.11		Dimethoate 30 % EC 7ml/10lt of
			L	water.
		4. Epilachna beetle.	-	Collect damaged leaves with grubs
		(Epilachna	\ <u> </u>	and egg masses and destroy them.
		viginctioctopancta	4.	Spray with methyl parathion 0.5%
		ta)//NGTLAL		or dimethoate 0.3% is effective.
		5. Leafhopper SAIHA		Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)	K	water (Sucking pest) or Dimethoate
		- 1		30 % EC 7ml/10lt of water.
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		Bacterial Wilt (Pseudomonas solanacearum) KOLASIB	 Fields should be kept clean and effected plants are to be uprooted and burnt. Spray Copper fungicides to control the disease (2% Bordeaux mixture.) The disease is more prevalent in the presence of root knot Nematodes, so control of these nematodes will suppress the disease spread. Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and Blitox 50 @ 5gm/ 15lt water.
French bean	Flowering stage		 Remove all unwanted leaves, branches and weed near to the plant. Earthing up the soil for better aeration. Plant should be supported by bamboo or woods 20-25 days after sowing.
		Blister beetle HHIP	 Manual collection of insect and destroy it immediately. Apply cypermethrin 2 gm/lt of water.
Brinjal	Vegetative stage	LUNGLEI	 Remove unwanted plant near base of the plant and cut dead branches. Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. Mulching with black polythene film reduces weed growth, increases the crop growth. Split dose of fertilizer application @ 50kg/ha urea.
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 ROLLEGIA	50kg/ha urea.
		1. Aphid(Aphis	• Spray surf water solution to the
	}	gossypii)	plat.
	(3 4 /	• Spray any one of the insecticides
	1		Imidacloprid 200 SL @ 0.25ml/lt of
	1		water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.
	 	2. Epilachna beetle.	• Spray with methyl parathion 0.5%
	MAMIT	(Epilachna	or dimethoate 0.3% is effective
	(viginctioctopancta	against flea beetle.
	\ \ \	ta)	AMPAUSAINOT nea sectio.
Rice	Transplanting	Kharif Rice	♣ Land preparation is done by
	stage	1 2	ploughing, harrowing, and levelling
	1		the field to make it suitable for
	1 1	~~ \ \ ~~	crop establishment.
			Ploughing should be done 3-4
	-	SERCHHIP	weeks prior to sowing.
		V L	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
		LUNGLEI	harrowing should be done across
	}		the first harrowing.
	i i	~ J	♣ 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
		LAWNGTLAN	more seedlings per hill, besides not
		SAIHA	being any additional advantage,
			involves an extra expense on
			seedlings. In case of transplanting
		7	7 D a a a
			7 P a g e

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				*:1 11 11: :1 1 C
				with old seedlings, the number of
				seedlings per hill can be increased.
			+	Remove the tip of rice seedling
		/		which reduces stem borer
) \	2 3		infestation.
Maize	Sowing stage	/\ (4	Pre-emergence application of
	[KOLASIB		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
	}	5 6		(Dual) @ 1.5-2.0 kg a.i ha-1,
				Pendamethalin (Stomp) @ 1-1.5 kg
				a.i. ha-large effective way for
	/ MAMIT	1 1)		control of many annual and broad
	()		leaved weeds
	\ \ \	AIZAWL C	HAMP	Remove unwanted plant near base
	\	1		of the plant and cut dead
	\	\$		branches.
	\ \		4	Earting up of soil along with
) ,		-	fertilizer mixture.
	\ \	7	1	Foliar spray of 0.1 % Endosulfan {2
		SERCHHI	. 7	ml (35 EC) in litre water at 30
	\ \frac{1}{2}	SERCHHI		days after germination is very
	,	V (-)	-17	effective against stem borer.
Ginger and	Land \			Remove unwanted plant near base
turmeric	preparatio <mark>n</mark>	_		of the plant and cut dead
			7	branches.
		LUNGLEI	P 4	Pre-emergence application of
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Atrazine (Atratraf 50 wp, Gesaprim
)	-		500 fw) @ of 1.0-1.5 kg a.i ha-1in
	1	\ \ \ \ \	7	600 litre water, Alachlor (Lasso) @
		1 1	11	2-2.5 kg a.i ha-1, Metolachlor
			N.	(Dual) @ 1.5-2.0 kg a.i ha-1,
		3 1 5 1	- 2	Pendamethalin (Stomp) @ 1-1.5 kg
) 4	1	a.i. ha-large effective way for
		1	4	control of many annual and broad
		LAWNGTLAL	1	leaved weeds.
			#	Earting up of soil along with
		SAIHA		fertilizer mixture.
		Thrips		Spray Roger or Monocrotophos (2.5
		f f		ml/lt) for controlling thrips.
		7 1		

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		Scales	♣ Spray Quinalphos or
			Monocrotophos (2.5 ml/lt) for
			controlling scales.
Pig	All stages	Porcine Reproductive	 Culling of positive pigs or piglets.
) \	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 ₂ B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta		Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	7	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	Ţ.	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	7:1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	{ : }	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	<u></u>

Collaborating Department:

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

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District: Lawngtlai Period: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
Rainfall (mm)	7	5	7	12	10
Max Temp (oC)	32	32	31	32	31
Min Temp (oC)	22	22	22	22	23
Cloud Coverage	Partially clear				
Max RH (%)	94	93	94	93	91
Min RH (%)	68	60	63	57	64
Wind Speed (KmpH)	4	5	6	6	6
*Wind Direction	E	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 PREMONSO)N- May 1-	31, 2015 (<i>F</i>	ercent of de	eviation from n	ormal in p	arenthesis)
Aizawl- 383.68mm C	hamphai-	239.49mm	Saiha-	109.52 mm	Kolasib-	352.38mm
(341.8mm)	(2	50.30mm)		(87.2mm)		(380.9mm)
Lawngtlai-321.51mm	Lunglei-34	14.00mm	Mami	t-449.48mm	Serchhip	-411.72mm
(285.5mm)	(1	86.21mm)		(442.80mm)		(25.9mm)
Weather summary of	the	Weather	forecast va	lid from 20th	June, 2015	To 24 th
past three days				June. 2015.		

<u> </u>	
	There are chances of moderate rainfall during the next 5
	day. The maximum and minimum temperatures for the next
	5 days may range for 31-32°C and 22-23°C. Maximum
	relative humidity is expected in the range of 91-94% and
	minimum may from 57-68%. Wind direction would be
	southeasterly with the wind speed of 4-6 km per hour.
	Dense cloudy sky will prevail during the next five days.

		Weekly cumulative rainfall: 41.0 mm		
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories	
Khasi Mandarin and acid lime	Transplant stage	LAWINGTLAI	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K ₂ O/plant and 4 g of P ₂ O 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/MIII	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	\$ *	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

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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
) \	3		polythene bags.
	-	A	4	The seedlings are planted in field
		KOLASIB	James .	when they become 3-4 months old.
	1		4	Mature 30-35 cm long stem with 3
	/	~~ }		nodes of pencil thickness should
	· · · · · · · · · · · · · · · · · · ·			be planted in nursery
	}	3 5		beds/polythene bags having
				suitable potting media.
	{	/ T	+	Apply well decompose FYM @
	/ MAMIT			15kg/pit/year along with
	<u> </u>	AIZAWI TCH	AMD	100.50.100 g NPK per pit.
Pineapple	Flowering	3	-	Apply flowering inducing chemical
	stage)		(Ethrel 10 PPM+2% urea+0.04%
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 2		Sodium Carbonate) should be
	7			applied in the heart of the plant. In
) (-\-	evening and only when plants have
))		L).	at least 32 leaves.
		SERCHHIP	/*	The flowering emergence will come
	1		N.	out after 55-60 days after chemical
			l (.	spraying.
		1		Apply split doses of fertilizer @ 60:
		-		_50:60 g per plant.
			K *	Remove all unwanted leaves,
		LUNGLEI	J*	branches and weed near to the
0.1	77 . 4 4 .		-	plant.
Colocasia	Vegetative	2	-	Remove unwanted plant near base
	stage	10		of the plant and cut dead
			_	branches.
) 🔭	Earthing up soil at base of the
			ſ	plant along with split doses of
) <u> </u>	fertilizer.
		1		Proper drainage is required to avoid water logging.
		LAWNGTLAL	4	Mulching with black polythene is
) / SAIHA		found beneficial for both reducing
			اليم	the weed and increasing the yield.
		Corm borer	\ 4	Carbofuran 3G @1.5 kg a.i./ha
		Com boier	-	Carboiurair od w1.5 kg a.i./ iid
		7. 7.		4 P a g e

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				applied in root zone when egg
				laying ooze is observed at plant
Okra	Flowering stage	1. Clean cultivation or	4	base. Mulching (if dry spell is there)
OKIA	Flowering stage	remove all		Give irrigation at regular interval
	_	unwanted plant	_ I	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
	}			cultivation and hand weeding may
				be used to minimize weeds in the
	₹			inter row zone.
	/ MAMIT	\	+	Black plastic mulch may be used
	\ \	AIZAWL CH	AMP)	to suppress weed growth. The
	ì			black plastic mulch also keeps the soil warm and encourages plant
	l l	<i>ξ ξ</i>		growth.
	1	1. Aphid (Aphis	•	Spray surf water solution to the
	٠ (gossypii)	-	plat
	\ \	32/31/7	1	Spray any one of the insecticides
		SERCHHIP	1	Imidacloprid 200 SL @ 0.25ml/lt of
		SERCHAIF	I C	water (Sucking pest) or Dimethoate
		· ()		30 % EC 7ml/10lt of water.
		2. Blister beetle		Manual collection of insect and
		_	, I	destroy it immediately.
			2.	Apply cypermethrin 2 gm/lt of
	<u> </u>	LUNGLEI	7	water.
	\	3. Flea beetle (Phylliodes balyi)	•	Shake plants to dislodge grubs,
	\	(1 rigitiones buigt)		pupae and adults and destroy. Spray any one of the insecticides
		1	_	Imidacloprid 200 SL @ 0.25ml/lt or
			\	Dimethoate 30 % EC 7ml/10lt of
			ľ	water.
		4. Epilachna beetle.	•	Collect damaged leaves with grubs
		(Epilachna	4	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	\circ	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)		water (Sucking pest) or Dimethoate
		4		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 /	solanacearum)		and burnt. Spray Copper fungicides to control
	\ \L	(T)	•	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
	Į.		•	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.
) ,		\.	Plant should be supported by
))			bamboo or woods 20-25 days after
	-	SERCHHIP		sowing.
		Blister beetle	\)•	Manual collection of insect and
			٨	destroy it immediately. Apply cypermethrin 2 gm/lt of
		_	. /	water.
Brinjal	Vegetative		§ 4	Remove unwanted plant near base
	stage	LUNGLEI	Ε.	of the plant and cut dead
	\	~ /	4	branches.
	,		-	Pre emergence application of Basalin @0.5 ml/lit of water for
				reduce grass type weed.
) 🖶	Mulching with black polythene film
		5 67 9		reduces weed growth, increases the
		Y	L	crop growth. Split dose of fertilizer application @
		LAWNGTLA		50kg/ha urea.
Tomato	Vegetative	SAIHA	4	Remove unwanted plant near base
	stage		الح	of the plant and cut dead
			<u>.</u>	branches.
			-	Pre emergence application of
		- N- (6 P a g e

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	7	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	2. Epilachna beetle. (Epilachna viginctioctopancta ta)	• Spray with methyl parathion 0.5% or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting	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
		7. 7.	7 P a g e

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	5		4	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		*	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
		AIZAWL CH	AMP	control of many annual and broad
Ginger and turmeric	Land preparation	LUNGLEI	+	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-lin 600 litre water, Alachlor (Lasso) @
		LAWNGTLAL	7	2-2.5 kg a.i ha-1, Metolachlor (Dual) @ 1.5-2.0 kg a.i ha-1, Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-1arge effective way for control of many annual and broad leaved weeds. Earting up of soil along with fertilizer mixture.
		Thrips		Spray Roger or Monocrotophos (2.5

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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
		3	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	<u>\</u>	~ /	and R ₂ B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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Expert committee members:

Dr. S.B. Singh		Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha		Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	:	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta		Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	1	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii		Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	Į.	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	P:10	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1:	Research Associate (Mizo	mamamralte@yahoo.com
	Ц	language Translator)	ſ

Collaborating Department:

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

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District: Lunglei Period: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
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				
Max RH (%)	96	96	98	96	95
Min RH (%)	69	72	71	58	66
Wind Speed (KmpH)	2	3	3	5	4
*Wind Direction	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.

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STATUS OF PR	REMONSOON- May	1-31, 2015 (Percent of	deviation from no	ormal in parenthesis)	
Aizawl- 383.6	8mm Champha	ai- 239.49mm Saih	a- 109.52 mm	Kolasib- 352.38mm	
(341.	8mm)	(250.30mm)	(87.2mm)	(380.9mm)	
Lawngtlai-321.	51mm Lungle	i-344.00mm Mam		Serchhip-411.72mm	
(285.	5mm)	(186.21mm)	(442.80mm)	(25.9mm)	
Weather su	mmary of the	Weather forecast v	alid from 20th J	une, 2015 To 24 th	
past the	hree days		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 31-32°C and 21-22°C. Maximum relative humidity is expected in the range of 95-98% and minimum may from 58-72%. Wind direction would be southeasterly with the wind speed of 2-5 km per hour. Partially cloudy sky will prevail during the next five days.			
		Weekly cumulative rainfall: 44.0 mm			
Main Crop/	Stage	Cultural practices/	_	Horticultural/ animal	
Animal		Pest/ Diseases	husban	dry advisories	
/Fisheries					
Khasi	Transplant	1		FYM @ 500g/pit is	
Mandarin	stage	1 LAWNGTLAL	applied at	15-20 days before	

SAIHA

1 | P a g e

planting along with 12 g each of N

and K₂O/plant and 4 g of

12 g Nitrogen and Potash/plant is

 $P_2O_5/plant$.

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E-mail: iaaskolasib@yahoo.in

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 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.
		4	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	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 LAWNGTLAL SAIHA	\$ 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		-	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.
	}	W)	-	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.
			*	Remove all unwanted leaves,
		LUNGLEI	12	branches and weed near to the
	<u> </u>			plant.
Colocasia	Vegetative	Q (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
		3 3 3	١ .	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 (a)1.0 kg a.i./ na
		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)
		remove all	1	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.
)		+	Shallow rooted inter-row
	1	2 5		cultivation and hand weeding may
				be used to minimize weeds in the
	∑ _{MAMIT}			inter row zone.
	MANNIII	\ \ ()	-	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
)))	Spray any one of the insecticides
		SERCHHIP	1	Imidacloprid 200 SL @ 0.25ml/lt of
			 }	water (Sucking pest) or Dimethoate
		2. Blister beetle		30 % EC 7ml/10lt of water. Manual collection of insect and
		2. Blister beetle		destroy it immediately.
			h .	Apply cypermethrin 2 gm/lt of
		LUNGLEI	2	water.
	(3. Flea beetle	•	Shake plants to dislodge grubs,
	1	(Phylliodes balyi)		pupae and adults and destroy.
	,	10 (~)	•	Spray any one of the insecticides
			N.	Imidacloprid 200 SL @ 0.25ml/lt or
)	Dimethoate 30 % EC 7ml/10lt of
		A Particular to at		water.
		4. Epilachna beetle.	L.	Collect damaged leaves with grubs
		(Epilachna viginctioctopancta		and egg masses and destroy them.
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		5. Leafhopper		Spray any one of the insecticides
		(Empoasca	5	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)		water (Sucking pest) or Dimethoate
		7 N. /		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
	\ \	(T)	•	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.
) ,		\.	Plant should be supported by
)))	bamboo or woods 20-25 days after
	(-/ <u>-</u> /	SERCHHIP		sowing.
	\	Blister beetle	\ `	Manual collection of insect and
	\ \ \ \ \			destroy it immediately.
		_	, /	Apply cypermethrin 2 gm/lt of water.
Brinjal	Vegetative		4	Remove unwanted plant near base
	stage	LUNGLEI	F	of the plant and cut dead
	1	~ /		branches.
	,		-	Pre emergence application of Basalin @0.5 ml/lit of water for
				reduce grass type weed.
) 👍	Mulching with black polythene film
		1 6 6		reduces weed growth, increases the
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	L.	crop growth. Split dose of fertilizer application @
		LAWNGTLA		50kg/ha urea.
Tomato	Vegetative	SAIHA	4	Remove unwanted plant near base
	stage		الح	of the plant and cut dead
			<u>.</u>	branches.
			-	Pre emergence application of
		- N- (6 P a g e

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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.
	\{\max_{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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	5		4	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	AMP.	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	Land preparation	LUNGLEI	-	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
		LAWNGTLAI SAIHA		500 fw) @ of 1.0-1.5 kg a.i ha-lin 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-large effective way for control of many annual and broad leaved weeds. Earting up of soil along with fertilizer mixture.
		Thrips	O 4	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
			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 ₂ B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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Expert committee members:

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	H	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	7	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	J:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	P:1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	9 :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
	Ц	language Translator)	<u>{</u>

Collaborating Department:

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

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District: Mamit Period: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015	
Rainfall (mm)	4	11	6	13	6	
Max Temp (oC)	34	33	33	32	32	
Min Temp (oC)	23	23	23	23	23	
Cloud Coverage	Partially clear	Partially clear	Partially clear	Partially clear	Mainly cloudy	
Max RH (%)	94	97	96	97	94	
Min RH (%)	59	71	72	65	66	
Wind Speed (KmpH)	2	2	4	5	4	
*Wind Direction	E	E	S-E	S-E	S-E	
Newtherder N. Newth Destauler N.D. Destauler D. Courth Destauler C.D.						

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	Champha	i- 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	Weather	forecast valid from 20th	June, 2015 To 24 th		

past three days	June, 2015.
	There are chances of moderate to light rainfall during the next 5
	day. The maximum and minimum temperatures for the next 5
	days may range for 32-34°C and 23°C. Maximum relative
	humidity is expected in the range of 94-97% and minimum may
	from 59-72%. Wind direction would be southeasterly with the
	wind speed of 2-5 km per hour. Partially cloudy sky will prevail
	during the next five days.

		Weekly cumulative rainfall: 40.0 mm			
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories		
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAL	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K ₂ O/plant and 4 g of P ₂ O ₅ /plant. 12 g Nitrogen and Potash/plant is recommended for first and second		

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				top dressing.
			-	Sucker and slips are usually
				preferred for planting.
		7	4	Potting mixture of soil, sand and
) \	2		FYM or compost should be in
	<u></u>	^		proper ratio.
		KOLASIB	4	For nursery only certified seed
	1			should be used.
	/	W >	4	Stagnation of water in beds should
	· · · · · · · · · · · · · · · · · · ·			be avoided.
	}	5 6	4	Seedling of uniform height should
				be selected for planting.
	1		4	Plant protection measures should
	/ MAMIT			be apliked.
Khasi	Vegetative	AIZAWL C	наме	Spray (10 ppm) of Gibberellic acid
Mandarin	stage	NIEATTE O	i io-xiriii .	should be done at colour break
and acid lime	\ \	5		stage to delay colour development,
	\	1 2		maintain firmness, extend
	1			harvesting period.
) (+ +	Fruit drops, which occur at least
))		>	twice in each crop, should be
		SERCHHIE	1/	controlled with the recommended
		(~-)	15	doses of GA3, urea, benomyl and
		, L	11	carbendazim at right time.
		4		Insect pests like Blackfly (Kolshi),
				_Citrus Psylla, Leaf miner, Bark
			7	eating caterpillar, Fruit sucking
		LUNGLEI	2	Moth, Mites, Twing Blight,
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Gummosis, Root rot and Collar rot
	1		1	should be controlled.
	4	10) +	Recommended fungicide
		131	:	(Carbendazium) and proper doses
			1	(0.1% or 1000 ppm) should be
		2	7	sprayed at proper time (One month
) \ \ \	1	and 15 days before harvest i.e. two
		Y	L	sprays).
Oil plam	Vegetative/	LAWNGTLAL	+	Remove all dead plants and replace
	Harvesting	SAIHA		with healthy seedling.
	stage	(SAIHA	+	Cleaning near base of the plant
		1 1	15	and cut unwanted branches.
			70#	Application of split dose of fertilizer
		h / 7		

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Banana	Varotativa	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.
Passion Fruit	Nursery stage		4	When two to three leaves develop,
rassion Fruit	nuisely stage		_	seedling should be transplanted in
				polythene bags.
	7 1	5	4	The seedlings are planted in field
	\ _	/T	_	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
	(3 1 /		beds/polythene bags having
		- /_ I		suitable potting media.
	1		4	Apply well decompose FYM @
	J		_	15kg/pit/year along with
	MAMIT (100.50.100 g NPK per pit.
Pineapple	Flowering		4	Apply flowering inducing chemical
Tincappie	stage	AIZAWL CH	AMP)	(Ethrel 10 PPM+2% urea+0.04%
	Jung	1		Sodium Carbonate) should be
	(3		applied in the heart of the plant. In
	\ \			evening and only when plants have
	٠, ١			at least 32 leaves.
	\ \		- 1	The flowering emergence will come
		SERCHHIP	1	out after 55-60 days after chemical
		SERCHHIF	I(spraying.
		V ()	4	Apply split doses of fertilizer @ 60:
			ملم	50:60 g per plant.
		_	4	Remove all unwanted leaves,
	(R	branches and weed near to the
		LUNGLEI	<u> </u>	plant.
Colocasia	Vegetative		#	Remove unwanted plant near base
	stage	ر ح		of the plant and cut dead
	-	10		branches.
			-	Earthing up soil at base of the
)	plant along with split doses of
			_	fertilizer.
) 🕇	Proper drainage is required to avoid water logging.
		1	1	Mulching with black polythene is
		LAWNGTLAL		found beneficial for both reducing
		SAIHA	1	the weed and increasing the yield.
		Corm borer	-	Carbofuran 3G @1.5 kg a.i./ha
			Ů,	applied in root zone when egg
		2. 15	<u> </u>	

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				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
	7 1	_unwanted plant	4	Provide banana shading to
	L.	from plot.		transplanted seedling.
		2. Provide split doses		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
	ξ	AIZAWL CH	AMP	black plastic mulch also keeps the
)	ALEATTE OIL		soil warm and encourages plant
		j		growth.
	1	1. Aphid (<i>Aphis</i>	•	Spray surf water solution to the
	1	gossypii)		plat
	} (\sim	\•	Spray any one of the insecticides
))			Imidacloprid 200 SL @ 0.25ml/lt of
		SERCHHIP		water (Sucking pest) or Dimethoate
		~	\	30 % EC 7ml/10lt of water.
	1	2. Blister beetle	•	Manual collection of insect and
			\triangle	destroy it immediately.
		_	• '	Apply cypermethrin 2 gm/lt of
		2 IDING1-E141	74	water.
)	3. Flea beetle	•	Shake plants to dislodge grubs,
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(Phylliodes balyi)		pupae and adults and destroy.
	1		•	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	\	and egg masses and destroy them.
		viginctioctopancta	4	Spray with methyl parathion 0.5%
		ta)NNGTLAL		or dimethoate 0.3% is effective.
		5. Leafhopper SAIHA		Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)	T.	water (Sucking pest) or Dimethoate
				30 % EC 7ml/10lt of water.
	<u> </u>	7		<u>'</u>
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Brinjal Vegetative stage Tomato Vegetative stage LAWNGTLAN LAWNGTLAN SAIHA	Fields should be kept clean and effected plants are to be uprooted and burnt. Spray Copper fungicides to control the disease (2% Bordeaux mixture.) The disease is more prevalent in the presence of root knot Nematodes, so control of these nematodes will suppress the disease spread. Soil drenching (Streptocycline sulphate 0.3 gm/lt of water) and Blitox 50 @ 5gm/ 15lt water.
Brinjal Vegetative stage LUNGLE Tomato Vegetative LAWNGTLAI	Remove all unwanted leaves, branches and weed near to the plant. Earthing up the soil for better aeration. Plant should be supported by bamboo or woods 20-25 days after sowing.
Tomato Vegetative LAWNGTLAI	Manual collection of insect and destroy it immediately. Apply cypermethrin 2 gm/lt of water.
	Remove unwanted plant near base of the plant and cut dead branches. Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed. Mulching with black polythene film reduces weed growth, increases the crop growth. Split dose of fertilizer application @ 50kg/ha urea.
	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 ROLLEGIA	50kg/ha urea.	
		1. Aphid(Aphis	• Spray surf water solution to the	
	}	gossypii)	plat.	
	(3 4 /	• Spray any one of the insecticides	
	1		Imidacloprid 200 SL @ 0.25ml/lt of	
	1		water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.	
	 	2. Epilachna beetle.	• Spray with methyl parathion 0.5%	
	MAMIT	(Epilachna	or dimethoate 0.3% is effective	
	(viginctioctopancta	against flea beetle.	
	\ \ \	ta)	AMPAUSAINGE Near Section	
Rice	Transplanting	Kharif Rice	♣ Land preparation is done by	
	stage	1 2	ploughing, harrowing, and levelling	
	1		the field to make it suitable for	
	1 1	~~ \ \ ~~	crop establishment.	
			Ploughing should be done 3-4	
	-	SERCHHIP	weeks prior to sowing.	
		V L	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	
		LUNGLEI	harrowing should be done across	
	}		the first harrowing.	
	i i	~ J	♣ 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	
		L DINDER TO A S	conditions is enough. The use of	
		LAWNGTLAN	more seedlings per hill, besides not	
		SAIHA	being any additional advantage,	
			involves an extra expense on	
			seedlings. In case of transplanting	
710000				
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	57		4	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	KOLASIB	^	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.
		SERCHHIP	IAMP	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 days after germination is very effective against stem borer.
Ginger and turmeric	Land preparation	LUNGLEI LAWNGTLAL 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.
		Thrips	5	Spray Roger or Monocrotophos (2.5 ml/lt) for controlling thrips.
		1 7 3		8 P a g e

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Mizoram Centre, Kolasib- 796081, MIZORAM

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



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



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



### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	H	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	7	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	J:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	P:1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	{ :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
	Ц	language Translator)	<u>{</u>

# **Collaborating Department:**

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

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Phone: +91 3837 220041, Fax: +91 3837 220560,



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Mizoram Centre, Kolasib- 796081, MIZORAM

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



Period: 20 - 24 June, 2015 District: Saiha

Bulletin No: -528/2015/ Bulletin/English

		,
5.2015	23.06.2015	24.06.2015
7	6	0

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
Rainfall (mm)	9	6	7	6	9
Max Temp (oC)	30	31	30	30	29
Min Temp (oC)	20	20	21	21	21
Cloud Coverage	Partially clear				
Max RH (%)	98	97	98	96	94
Min RH (%)	76	63	67	60	66
Wind Speed (KmpH)	2	2	2	4	4
*Wind Direction	E	E	E	E	E
Northerly N North Footerly N F Footerly P South Footerly C F					

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 light rainfall during the next 5 day. The
	maximum and minimum temperatures for the next 5 days
	may range for 29-31°C and 20-21°C. Maximum relative
	humidity is expected in the range of 94-98% and minimum
	may from 60-76%. Wind direction would be easterly to north
	westerly with the wind speed of 2-4 km per hour. Partially
	cloudy sky will prevail during the next five days.

Weather forecast valid from 20th June, 2015 To 24th

		Weekly cun	nulative rainfall: 37.0 mm
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAL	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K ₂ O/plant and 4 g of P ₂ O ₅ /plant.  12 g Nitrogen and Potash/plant is

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E-mail: iaaskolasib@yahoo.in

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)



	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	<ul> <li>♣ Spray (10 ppm) of Gibberellic acid should be done at colour break stage to delay colour development, maintain firmness, extend harvesting period.</li> <li>♣ 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.</li> <li>♣ 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.</li> <li>♣ 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).</li> </ul>	
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.	
2   Page				

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Mizoram Centre, Kolasib- 796081, MIZORAM

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



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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,
	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.
	}	W )	-	Mature 30-35 cm long stem with 3
	(	3 4 /		nodes of pencil thickness should
	7	(		be planted in nursery
	/			beds/polythene bags having
				suitable potting media.
	5		-	Apply well decompose FYM @
	∫ MAMIT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		15kg/pit/year along with
Dinasanila	731	AIZAWL CH	AMP	100.50.100 g NPK per pit.
Pineapple	Flowering	· ·	-	Apply flowering inducing chemical (Ethrel 10 PPM+2% urea+0.04%
	stage	1 2		Sodium Carbonate) should be
	λ,	3 ~ (		applied in the heart of the plant. In
	\			evening and only when plants have
	( (	~ /	N	at least 32 leaves.
	1.7		1	The flowering emergence will come
		SERCHHIP	II. T	out after 55-60 days after chemical
			7	spraying.
			4	Apply split doses of fertilizer @ 60:
				50:60 g per plant.
			<b>+</b>	Remove all unwanted leaves,
		LUNGLEI	4	branches and weed near to the
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	50 V 1 V V 50 BO 5001		plant.
Colocasia	Vegetative	6 (	-	Remove unwanted plant near base
	stage			of the plant and cut dead
				branches.
			\ <del>+</del>	Earthing up soil at base of the
			ľ	plant along with split doses of
		1 3 1	١	fertilizer.
			<b>-</b>	Proper drainage is required to
		LAWNGTLAL		avoid water logging.
		SAIHA	🔭	Mulching with black polythene is
			الما	found beneficial for both reducing
		Corm borer	\ <u> </u>	the weed and increasing the yield.  Carbofuran 3G @1.5 kg a.i./ha
		Corm porer	-	Carboiuraii od @1.5 kg a.i./ iia
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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)
	5) (	_remove all	4	Give irrigation at regular interval
	\ \	unwanted plant	4	Provide banana shading to
		from plot.	and the second	transplanted seedling.
	1	2. Provide split doses	4	Provide split doses of fertilizer @
	/	of fertilizer.		30kg/ha.
	7	(	+	Shallow rooted inter-row
	1			cultivation and hand weeding may
				be used to minimize weeds in the
	∑ MAMIT		4	inter row zone.  Black plastic mulch may be used
	/	1	_	to suppress weed growth. The
	3	(AIZAWL ∫CH	(AMP)	black plastic mulch also keeps the
	\	1		soil warm and encourages plant
	\	\$		growth.
	\	1. Aphid (Aphis	•	Spray surf water solution to the
	) (	gossypii)	_	plat
	) )		<b>)</b>	Spray any one of the insecticides
	Ş	SERCHHIP		Imidacloprid 200 SL @ 0.25ml/lt of
			<b>&gt;</b>	water (Sucking pest) or Dimethoate
		2. Blister beetle		30 % EC 7ml/10lt of water.  Manual collection of insect and
		2. 2		destroy it immediately.
		_	<b>R</b> •	Apply cypermethrin 2 gm/lt of
	\	LUNGLEI	12	water.
	3	3. Flea beetle	•	Shake plants to dislodge grubs,
	1	(Phylliodes balyi)		pupae and adults and destroy.
		I A	•	Spray any one of the insecticides
				Imidacloprid 200 SL @ 0.25ml/lt or
		) 7 (	)	Dimethoate 30 % EC 7ml/10lt of
		4. Epilachna beetle.		Water.
		(Epilachna	Γ.	Collect damaged leaves with grubs and egg masses and destroy them.
		viginctioctopancta		Spray with methyl parathion 0.5%
		ta) / SAIHA		or dimethoate 0.3% is effective.
		5. Leafhopper		Spray any one of the insecticides
		(Empoasca	3	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)		water (Sucking pest) or Dimethoate
		7, 7		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 /	solanacearum)		and burnt. Spray Copper fungicides to control
	\ \L	(T)	•	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
	Į.		•	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
	-	SERCHHIP		sowing.
		Blister beetle	\)•	Manual collection of insect and
			۸۵	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
	\	~ (	4	branches.
	,		-	Pre emergence application of Basalin @0.5 ml/lit of water for
				reduce grass type weed.
			) 🖶	Mulching with black polythene film
		1 4 4		reduces weed growth, increases the
		Y I	L.	crop growth.  Split dose of fertilizer application @
		LAWNGTLAL		50kg/ha urea.
Tomato	Vegetative	SAIHA	+	Remove unwanted plant near base
	stage		-	of the plant and cut dead
			ٽ <u>.</u>	branches.
			-	Pre emergence application of
		N-4 - 4		6   P a g e

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• Spray surf water solution to plat. • Spray any one of the insecticic Imidacloprid 200 SL @ 0.25ml/le water (Sucking pest) or Dimetho 30 % EC 7ml/10lt of water.  2. Epilachna beetle. (Epilachna viginctioctopaneta ta)  Rice Transplanting stage  * Spray surf water solution to plat. • Spray any one of the insecticic Imidacloprid 200 SL @ 0.25ml/le water (Sucking pest) or Dimetho 30 % EC 7ml/10lt of water. • Spray with methyl parathion 0.4 or dimethoate 0.3% is effect against flea beetle.  * Land preparation is done ploughing, harrowing, and levelled the field to make it suitable	
(Epilachna viginctioctopancta against flea beetle.  Rice Transplanting stage  Kharif Rice ploughing, harrowing, and levelle.	
stage ploughing, harrowing, and levell	
SERCHHIP  SERCHHIP  SERCHHIP  SERCHHIP  LUNGLE  LUNGLE	Rice
7   Pag	

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	5		4	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		*	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
		AIZAWL CH	AMP	control of many annual and broad
Ginger and turmeric	Land preparation	LUNGLEI	+	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
		SAIHA	5	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		
			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	\ \	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 ₂ B vaccine for adult birds.		
	Early stage	Coccidiosis	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)



### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	H	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	7	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	J:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	P:1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	{ :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
	Ц	language Translator)	<u></u>

# **Collaborating Department:**

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

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Phone: +91 3837 220041, Fax: +91 3837 220560,



#### 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: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

	- N 1						
Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015		
Rainfall (mm)	10	13	12	11	5		
Max Temp (oC)	33	31	29	30	29		
Min Temp (oC)	19	20	21	20	20		
Cloud Coverage	Partially clear	Partially clear	Partially clear	Partially clear	Partially clear		
Max RH (%)	100	99	100	100	100		
Min RH (%)	79	80	75	64	69		
Wind Speed (KmpH)	2	2	2	2	2		
*Wind Direction	N-E	E	E	E	S-E		
		n-Easterly- <mark>N-E</mark> , Ea					
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)							
<b>Aizawl- 383.68mm</b>	Aizawl- 383.68mm Champhai- 239.49mm Saiha- 109.52 mm Kolasib- 352.38mm						

(341.8mm)(250.30mm)(87.2mm)(380.9mm)Lunglei-344.00mm Lawngtlai-321.51mm Mamit-449.48mm Serchhip-411.72mm (442.80mm)(285.5mm)(186.21mm)(25.9mm)Weather forecast valid from 20th June, 2015 To 24th

June, 2015.
There are chances of moderate to light rainfall during the
next 5 day. The maximum and minimum temperatures for
the next 5 days may range for 29-33°C and 19-21°C.
Maximum relative humidity is expected in the range of 99-
100% and minimum may from 64-80%. Wind direction
would be northeasterly to southeasterly with the wind speed
of 2 km per hour. Partially cloudy sky will prevail during
the next five days.

		Weekly cumulative rainfall: 51.0 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 ₂ O/plant and 4 g of P ₂ O ₅ /plant.		

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E-mail: iaaskolasib@yahoo.in

Weather summary of the



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Mizoram Centre, Kolasib- 796081, MIZORAM

(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
	) \	2		preferred for planting.
		KOLASIB	+	Potting mixture of soil, sand and
	Į.	No Endis	-	FYM or compost should be in proper ratio.
	)	(A)	4	For nursery only certified seed
	5			should be used.
	<b>}</b>	5 5 6	4	Stagnation of water in beds should
			١.	be avoided.
	3		+	Seedling of uniform height should
	/ MAMIT		4	be selected for planting. Plant protection measures should
	3	AIZAWL CH	(AMP)	be apliked.
Khasi	Vegetative		4	Spray (10 ppm) of Gibberellic acid
Mandarin	stage	1 2		should be done at colour break
and acid lime	7			stage to delay colour development,
	{ (	~ / / ~		maintain firmness, extend harvesting period.
	<i></i>			Fruit drops, which occur at least
		SERCHHIP		twice in each crop, should be
		V C	1	controlled with the recommended
			JJA.	doses of GA3, urea, benomyl and
		_	1	carbendazim at right time. Insect pests like Blackfly (Kolshi),
			7	Citrus Psylla, Leaf miner, Bark
	>	LUNGLEI	7	eating caterpillar, Fruit sucking
	\	A 1	/	Moth, Mites, Twing Blight,
	1			Gummosis, Root rot and Collar rot
				should be controlled.
		1 7 0	) 🔭	Recommended fungicide (Carbendazium) and proper doses
			(	(0.1% or 1000 ppm) should be
		1	L	sprayed at proper time (One month
		LAWNGTLAL	1	and 15 days before harvest i.e. two
0:1 ::1:::::	Voget-4:/	SAIHA		sprays).
Oil plam	Vegetative/ Harvesting		الله ا	Remove all dead plants and replace with healthy seedling.
	stage		$\lor_{4}$	Cleaning near base of the plant
	<b>.</b>	7 3		
		- N 4 6		2   P a g e

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Banana Vegeta harve		Application of split dose of for 600: 200:100 (g/pt).	•
	LUNGLE	Apply micro-nutrients viz copper, manganese, iron, and molybdenum are requ ample quantities for surnutrients and also reduce disorders which may led decline of the whole orchard. Pruning on a regular basis runwanted or a sucker, production mats in opcondition, saves fertilizer, repest and disease.  Fruits are harvested when attain full size, develop attain full size, develop attains the same attain full size, develop attains and management of the same attain full size, develop attains full size, develo	boron ired in pplying serious ead to
	Comb weev stem weevi	effectively controlled weevils.	of neem ake at months inished

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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,
	) (	J ?		seedling should be transplanted in
	L.			polythene bags.
		KOLASIB	4	The seedlings are planted in field
	- {	( )		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
	Į.			suitable potting media.
	/ MAMIT	1 )	4	Apply well decompose FYM @
	ζ	AIZAWL CH	A MID.	15kg/pit/year along with
	\ \ \	AIZAVIL ICH	AMP)	100.50.100 g NPK per pit.
Pineapple	Flowering	5	#	Apply flowering inducing chemical
	stage	1 2		(Ethrel 10 PPM+2% urea+0.04%
	1			Sodium Carbonate) should be
	) (		-	applied in the heart of the plant. In
	) )		- }	evening and only when plants have
		SERCHHIP	1	at least 32 leaves.
	{		\ +	The flowering emergence will come
				out after 55-60 days after chemical
				spraying.
		_	-	Apply split doses of fertilizer @ 60:
			ζ.	50:60 g per plant.
		LUNGLEI	j= 🕶	Remove all unwanted leaves,
	<b>?</b>	J		branches and weed near to the
0-1-	77		-	plant.
Colocasia	Vegetative	10	-	Remove unwanted plant near base
	stage			of the plant and cut dead
			) 🕌	branches.
			-	Earthing up soil at base of the
			)	plant along with split doses of fertilizer.
		1		Proper drainage is required to
		LAWNGTLAL	_	avoid water logging.
		) / SAIHA	1	Mulching with black polythene is
			J	found beneficial for both reducing
			١	the weed and increasing the yield.
		7		the weed and mercasing the yield.
		7. 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)
		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 @
	5	of fertilizer.		30kg/ha.
	<b> </b>		4	Shallow rooted inter-row
				cultivation and hand weeding may
	J			be used to minimize weeds in the
	/ MAMIT			inter row zone.
	(	)	4	Black plastic mulch may be used
	\ \ \	AIZAWL CH	(AMP)	to suppress weed growth. The
	\	4		black plastic mulch also keeps the
	\	( )		soil warm and encourages plant
	\ \			growth.
	) ,	1. Aphid (Aphis	•	Spray surf water solution to the
	\ \	gossypii)	1	plat
	( )	SERCHHIP	<b>7.</b>	Spray any one of the insecticides
	-	SERCHNIF	(	Imidacloprid 200 SL @ 0.25ml/lt of
	\	· L	1	water (Sucking pest) or Dimethoate
	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u></u>	00	30 % EC 7ml/10lt of water.
		2. Blister beetle	• )	Manual collection of insect and
			R	destroy it immediately.
	1	LUNGLEI	j* •	Apply cypermethrin 2 gm/lt of
	}	J		water.
		3. Flea beetle	•	Shake plants to dislodge grubs,
	,	(Phylliodes balyi)		pupae and adults and destroy.
			•	Spray any one of the insecticides
		190	1	Imidacloprid 200 SL @ 0.25ml/lt or
			ľ	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		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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		deva <mark>sta</mark> ns)		water (Sucking pest) or Dimethoate
		( Destantial Wile		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.)
	\ \ \		•	The disease is more prevalent in
	/	~~ }		the presence of root knot
	λ			Nematodes, so control of these
	1	2 5		nematodes will suppress the
				disease spread.
	} MAMIT		•	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 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
				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
	1	10 3	4	branches. Pre emergence application of
		101	_	Basalin @0.5 ml/lit of water for
			)	reduce grass type weed.
			4	Mulching with black polythene film
		1	_	reduces weed growth, increases the
		LAWNGTLAL	1	crop growth.  Split dose of fertilizer application @
		SAIHA	T	50kg/ha urea.
Tomato	Vegetative			Remove unwanted plant near base
	stage		S	of the plant and cut dead
				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. _{CH}	A MP/	water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.  Spray with methyl parathion 0.5%
Dies	Transplanting	(Epilachna viginctioctopancta ta)		or dimethoate 0.3% is effective against flea beetle.
Rice	Transplanting stage	SERCHHIP	***	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
		Man of	<b>+</b>	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.
		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,
		1 1		7   P a g e

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		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.
	F	Scales	Spray Quinalphos or
	17	7	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
	7		vaccines at 2 months and yearly
	1	> 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>
	\ \frac{1}{2}	AIZAWL CH	Primary vaccination 6 month or
			above
	ì		Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	\		and $R_2B$ vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi		Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	ŀ	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh		Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	7	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana		Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	1:5	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	9:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	):	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	<u> </u>

# **Collaborating Department:**

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

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District: Aizawl Period: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
Rainfall (mm)	8	19	8	16	8
Max Temp (oC)	31	31	30	29	30
Min Temp (oC)	20	21	22	21	21
Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Partially clear	Mainly cloudy
Max RH (%)	97	98	98	98	97
Min RH (%)	66	79	73	74	64
Wind Speed (KmpH)	2	3	2	3	3
*Wind Direction	E	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 PREMONS	800N- May 1-31, 2015 ( <i>Per</i>	cent of deviation from n	ormal 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 rainfall during the next 5
	day. The maximum and minimum temperatures for the next 5
	days may range for 29-31°C and 20-22°C. Maximum relative
	humidity is expected in the range of 97-98% and minimum may
	from 64-79%. Wind direction would be southeasterly with the
	wind speed of 2-3 km per hour. Dense cloudy sky will prevail
	during the next five days.

Weather forecast valid from 20th June, 2015 To 24th

		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	LAWNGTLAL	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K ₂ O/plant and 4 g of P ₂ O ₅ /plant.  12 g Nitrogen and Potash/plant is recommended for first and second		

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Phone: +91 3837 220041, Fax: +91 3837 220560,

E-mail: iaaskolasib@yahoo.in

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2 | P a g e

				top dressing.
			-	Sucker and slips are usually
				preferred for planting.
		/ }	+	Potting mixture of soil, sand and
	) \	2		FYM or compost should be in
	\ \-\	^		proper ratio.
		KOLASIB	- 4	For nursery only certified seed
		( )	-	should be used.
	)	WS )	4	Stagnation of water in beds should
	5	2 - 1 (		be avoided.
	<b>S</b>		4	Seedling of uniform height should
				be selected for planting.
	J		4	Plant protection measures should
	MAMIT	1		be apliked.
Khasi	Vegetative		4	Spray (10 ppm) of Gibberellic acid
Mandarin	stage	AIZAWL CH	(AMP	should be done at colour break
and acid lime	ou.B	2		stage to delay colour development,
and dold mile	Į.			maintain firmness, extend
	l,			harvesting period.
			4	Fruit drops, which occur at least
	( (		1	twice in each crop, should be
	17		2	controlled with the recommended
		SERCHHIP	(	doses of GA3, urea, benomyl and
		V- L.	>	carbendazim at right time.
		Į.	14	Insect pests like Blackfly (Kolshi),
			4/	Citrus Psylla, Leaf miner, Bark
		· -		eating caterpillar, Fruit sucking
			2	Moth, Mites, Twing Blight,
	1	LUNGLEI	7	Gummosis, Root rot and Collar rot
	(			should be controlled.
	\	5~~	4	Recommended fungicide
			_	(Carbendazium) and proper doses
				(0.1% or 1000 ppm) should be
			)	sprayed at proper time (One month
		( ) 7		and 15 days before harvest i.e. two
		( ~	)	sprays).
Oil plam	Vegetative/		-	Remove all dead plants and replace
On plan	Harvesting	LAWNGTLAL		with healthy seedling.
	stage	/ SAIHA	1	Cleaning near base of the plant
	suge		J	and cut unwanted branches.
		_	<u>.</u>	Application of split dose of fertilizer
		2	-	application of split dose of leftilizer

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Banana	Veretative	KOLASIB		+	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	1	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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4 | P a g e

				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	4	plant.
Colocasia	Vegetative 🔪		4	Remove unwanted plant near base
	stage	6 1	f	of the plant and cut dead
	,			branches.
		[ ]	+	Earthing up soil at base of the
			<b>%</b>	plant along with split doses of
		2 1 3 3	/ .	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	<b>∵</b>	Carbofuran 3G @1.5 kg a.i./ha applied in root zone when egg
		2		applied in root zone when egg

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



				laying ooze is observed at plant
	731	1.01	-	base.
Okra	Flowering stage	1. Clean cultivation or remove all	+	Mulching (if dry spell is there)
	1 1	unwanted plant	-	Give irrigation at regular interval Provide banana shading to
	_	from plot.	_	Provide banana shading to transplanted seedling.
		2. Provide split doses	4	Provide split doses of fertilizer @
	(	of fertilizer.		30kg/ha.
	)	(4)	4	Shallow rooted inter-row
	>	2		cultivation and hand weeding may
	}	5 5		be used to minimize weeds in the
				inter row zone.
	₹		-	Black plastic mulch may be used
	/ MAMIT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		to suppress weed growth. The
	\ \ \	AIZAWL CH	AMP/	black plastic mulch also keeps the soil warm and encourages plant
	l l			growth.
		1. Aphid (Aphis	•	Spray surf water solution to the
	\ \	gossypii)		plat
	) 6			Spray any one of the insecticides
	) )		-	Imidacloprid 200 SL @ 0.25ml/lt of
		SERCHHIP		water (Sucking pest) or Dimethoate
			Ι.	30 % EC 7ml/10lt of water.
		2. Blister beetle	•	Manual collection of insect and
	]		$\Delta \Delta$	destroy it immediately.
		-		Apply cypermethrin 2 gm/lt of water.
	\	3. Flea beetle	J* •	Shake plants to dislodge grubs,
	(	(Phylliodes balyi)		pupae and adults and destroy.
	\	· ~	•	Spray any one of the insecticides
		1111		Imidacloprid 200 SL @ 0.25ml/lt or Dimethoate 30 % EC 7ml/10lt of
			<b>.</b>	water.
		4. Epilachna beetle.		Collect damaged leaves with grubs
		(Epilachna	\	and egg masses and destroy them.
		viginctioctopancta	<u>_</u> \•	Spray with methyl parathion 0.5%
		ta)//NGTLAJ		or dimethoate 0.3% is effective.
		5. Leafhopper SAIHA	•	Spray any one of the insecticides
		(Empoasca		Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)	O .	water (Sucking pest) or Dimethoate
		L PL		30 % EC 7ml/10lt of water.
		4		5   P a g e

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Brinjal  Vegetative stage  UNGLE  Brinjal  Vegetative stage  LUNGLE  Water.  Remove unwanted plant near bas of the plant and cut dea branches.  Pre emergence application of reduce grass type weed.  Mulching with black polythene fill reduces weed growth, increases the crop growth.  Split dose of fertilizer application of 50kg/ha urea.  Tomato  Vegetative stage  LAWNGTLAI  SAIHA  SAIHA  Sowing.  Manual collection of insect and destroy it immediately.  Apply cypermethrin 2 gm/lt of water.  Remove unwanted plant near bas of the plant and cut dea branches.  Pre emergence application of the plant and cut dea branches.			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>
destroy it immediately.  Apply cypermethrin 2 gm/lt of water.  Brinjal  Vegetative stage  LUNGLEI  Remove unwanted plant near bas of the plant and cut dea branches.  Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene filt reduces weed growth, increases the crop growth.  Split dose of fertilizer application of 50kg/ha urea.  Tomato  Vegetative stage  LAWNGTLAI  Remove unwanted plant near bas of the plant and cut dea branches.  Pre emergence application of the plant and cut dea branches.	French bean	Flowering stage		<ul> <li>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>
of the plant and cut dea branches.  Pre emergence application of Basalin @0.5 ml/lit of water for reduce grass type weed.  Mulching with black polythene filt reduces weed growth, increases the crop growth.  Split dose of fertilizer application of 50kg/ha urea.  Tomato  Vegetative stage  SAIHA  Remove unwanted plant near base of the plant and cut dea branches.  Pre emergence application of the plant and cut dea branches.			Blister beetlehhip	destroy it immediately.  • Apply cypermethrin 2 gm/lt of
stage  SAIHA of the plant and cut dea branches.  Pre emergence application of		stage		<ul> <li>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>
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Tomato	_		

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			reduce grass type weed.
			♣ Mulching with black polythene film
			reduces weed growth, increases the
	1 1		crop growth.
	) \	5	Split dose of fertilizer application @
	-	A JEDINASIE:	50kg/ha urea.
	Į	1. Aphid(Aphis	• Spray surf water solution to the
	)	gossypii)	plat.
	Ι (	1 1 1	• Spray any one of the insecticides Imidacloprid 200 SL @ 0.25ml/lt of
	<b>1</b>		water (Sucking pest) or Dimethoate
			30 % EC 7ml/10lt of water.
	1	2. Epilachna beetle.	• Spray with methyl parathion 0.5%
	/ MAMIT	(Épilachna	or dimethoate 0.3% is effective
	l 5	viginctioctopancta	against flea beetle.
		ta)	Alli Al
Rice	Transplanting	Kharif Rice	Land preparation is done by
	stage	3 ~ (	ploughing, harrowing, and levelling
	\	1 3 2	the field to make it suitable for
	1 (		crop establishment.
	1 //		Ploughing should be done 3-4 weeks prior to sowing.
		SERCHHIP	★ After ploughing, harrowing the field
		V (	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
	}	J	the first harrowing.
	1	اد ہے	♣ Under good management and
		10	adequate nitrogen levels, the
			optimum spacing for rice varieties should be around 20x15 cms both
			for kharif and rabi crops.
		1 6 3 3 4	Transplanting two to three
		V (	seedlings per hill under normal
		LAWNGTLAL	conditions is enough. The use of
		SAIHA	more seedlings per hill, besides not
		SAIRA	being any additional advantage,
		_	involves an extra expense on
			seedlings. In case of transplanting
		7	7   Page
			riage

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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 infestation.
Maize	Sowing stage	KOLASIB	+	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
	\{\mamin	AIZAWL CH	la M <b>.P</b> i	control of many annual and broad
	\ (		+	branches.  Earting up of soil along with fertilizer mixture.  Foliar spray of 0.1 % Endosulfan {2
		SERCHHIP	(	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.
		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,
		LAWNGTLAI	\ \	Pendamethalin (Stomp) @ 1-1.5 kg a.i. ha-large effective way for control of many annual and broad leaved weeds.
		Thrips	5	Earting up of soil along with fertilizer mixture.  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			
	/	~ }	interval/6 month interval			
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week an			
	}	Disease (FMD)	repeat every 6 month.			
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).			
	₹		Primary vaccination 6 month or			
	/ MAMIT	1	above			
	5	AIZAWI CH	Revaccination annually			
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth			
	)		and R ₂ B vaccine for adult birds.			
	Early stage	Coccidiosis	Amprolium or coccidiostat			



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### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	H	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	7	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana	J:	Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	P:1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	{ :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
	Ц	language Translator)	<u></u>

# **Collaborating Department:**

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

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



District: Champhai Period: 20 - 24 June, 2015

Bulletin No: -528/2015/ Bulletin/English

Date of issue: 19th June, 2015

Parameters         20.06.2015         21.06.2015         22.06.2015         23.06.2015         24.06.2015           Rainfall (mm)         11         25         15         17         10           Max Temp (oC)         30         30         30         28         29           Min Temp (oC)         20         21         22         21         21           Cloud Coverage         Partially clear         Partially clear         Mainly cloudy         Partially clear         Mainly cloudy           Max RH (%)         96         96         97         97         97           Min RH (%)         73         80         73         74         66						
Max Temp (oC)         30         30         30         28         29           Min Temp (oC)         20         21         22         21         21           Cloud Coverage         Partially clear         Partially clear         Mainly cloudy         Partially clear         Mainly cloudy           Max RH (%)         96         96         97         97         97	Parameters	20.06.2015	21.06.2015	22.06.2015	23.06.2015	24.06.2015
Min Temp (oC)2021222121Cloud CoveragePartially clearPartially clearMainly cloudyPartially clearMainly cloudyMax RH (%)9696979797	Rainfall (mm)	11	25	15	17	10
Cloud CoveragePartially clearPartially clearMainly cloudyPartially clearMainly cloudyMax RH (%)9696979797	Max Temp (oC)	30	30	30	28	29
Max RH (%) 96 96 97 97 97	Min Temp (oC)	20	21	22	21	21
	Cloud Coverage	Partially clear	Partially clear	Mainly cloudy	Partially clear	Mainly cloudy
Min RH (%) 73 80 73 74 66	Max RH (%)	96	96	97	97	97
	Min RH (%)	73	80	73	74	66
Wind Speed (KmpH)         2         2         2         2         2	Wind Speed (KmpH)	2	2	2	2	2
*Wind Direction S-E N-E S-E S S	*Wind Direction	S-E	N-E	S-E	S	S

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

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

(341.8mm)	ni- 239.49mm (250.30mm) -344.00mm (186.21mm)	Saiha- 109.52 mm (87.2mm) Mamit-449.48mm (442.80mm)	Kolasib- 352.38mm (380.9mm) Serchhip-411.72mm (25.9mm)
Weather summary of the	Weather fo	orecast valid from 20th Ju	une, 2015 To 24 th
past three days		June, 2015.	
	maximum and range for 28-3 expected in the Wind direction	aces of moderate to light during minimum temperatures for 80°C and 20-22°C. Maximum range of 96-97% and minimal would be Northeasterly to 2 km per hour. Dense cloudy ays.	r the next 5 days may m relative humidity is num may from 66-80%. southeasterly with the
	TI	lookly oumulative rainfalls	78 0 mm

		uic liext live days.		
		Weekly cur	mulative rainfall: 78.0 mm	
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories	
Khasi Mandarin and acid lime	Transplant stage	LAWNGTLAL	Well rotten FYM @ 500g/pit is applied at 15-20 days before planting along with 12 g each of N and K ₂ O/plant and 4 g of P ₂ O ₅ /plant.  12 g Nitrogen and Potash/plant is recommended for first and second	

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			top dressing.  Sucker and slips are usually preferred for planting.
	7 /	1	♣ Potting mixture of soil, sand and FYM or compost should be in
	-	KOLASIB	proper ratio.
	{	1.	For nursery only certified seed should be used.
	/		♣ Stagnation of water in beds should
	}		be avoided.  4 Seedling of uniform height should
			be selected for planting.
			♣ Plant protection measures should
Khasi	Vegetative		be apliked.  Spray (10 ppm) of Gibberellic acid
Mandarin	stage	AIZAWL CHA	should be done at colour break
and acid lime	1	{	stage to delay colour development, maintain firmness, extend
	· ·		harvesting period.
	3 0		Fruit drops, which occur at least
	))		twice in each crop, should be controlled with the recommended
		SERCHHIP	doses of GA3, urea, benomyl and
		, S	carbendazim at right time.  Insect pests like Blackfly (Kolshi),
			Citrus Psylla, Leaf miner, Bark
	(	1	eating caterpillar, Fruit sucking
		LUNGLEI	Moth, Mites, Twing Blight, Gummosis, Root rot and Collar rot
	\	/	should be controlled.
	1	10 (~)	Recommended fungicide (Carbendazium) and proper doses
			(0.1% or 1000 ppm) should be
			sprayed at proper time (One month
		1 2 )	and 15 days before harvest i.e. two sprays).
Oil plam	Vegetative/	LAWNGTLAL	Remove all dead plants and replace
	Harvesting stage	SAIHA	with healthy seedling.  Cleaning near base of the plant
	stage		and cut unwanted branches.
			4 Application of split dose of fertilizer
		7, 7	2   P a g e

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

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				laying ooze is observed at plant
				base.
Okra	Flowering stage	1. Clean cultivation or	+	Mulching (if dry spell is there)
	1 1	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 @
	1	of fertilizer.		30kg/ha.
	/	" 7 4 /	+	Shallow rooted inter-row
	7	(		cultivation and hand weeding may
	1	> 5		be used to minimize weeds in the
				inter row zone.
	₹		+	Black plastic mulch may be used
	/ MAMIT	1		to suppress weed growth. The
	5	AIZAWL CH	AMP	black plastic mulch also keeps the
	)			soil warm and encourages plant
	1			growth.
	).	1. Aphid (Aphis	•	Spray surf water solution to the
	\	gossypii)		plat
	1 1	~ ) ~	\•	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
			$\wedge$	destroy it immediately.
		~	• '	Apply cypermethrin 2 gm/lt of
			S.	water.
	)	3. Flea beetle	•	Shake plants to dislodge grubs,
	\	(Phylliodes balyi)		pupae and adults and destroy.
	1		•	Spray any one of the insecticides
		1131		Imidacloprid 200 SL @ 0.25ml/lt or
				Dimethoate 30 % EC 7ml/10lt of
		A Failaches hostle	-	water.
		4. Epilachna beetle. (Epilachna	•	Collect damaged leaves with grubs
		viginctioctopancta	L	and egg masses and destroy them.
		ta)NNGTLAL	1	Spray with methyl parathion 0.5%
			-	or dimethoate 0.3% is effective.
		5. Leafhopper SAIHA	1	Spray any one of the insecticides
		(Empoasca	T-	Imidacloprid 200 SL @ 0.25ml/lt of
		devastans)	$^{\circ}$	water (Sucking pest) or Dimethoate
		7		30 % EC 7ml/10lt of water.
		- V		5   P a g e

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		solanacearum)  KOLASIB	<ul> <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 beetle HHIP	<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	LAWNGTLAL	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
	17		crop growth.
	) \	8	♣ Split dose of fertilizer application @
	-	A KOLOSIB.	50kg/ha urea.
		1. Aphid(Aphis	• Spray surf water solution to the
	)	gossypii)	plat.
	(	3 1 /	• Spray any one of the insecticides
	(		Imidacloprid 200 SL @ 0.25ml/lt of
	[		water (Sucking pest) or Dimethoate 30 % EC 7ml/10lt of water.
	)	2. Epilachna beetle.	• Spray with methyl parathion 0.5%
	MAMIT	(Epilachna	or dimethoate 0.3% is effective
	ζ	viginctioctopancta	appa against flea beetle.
	\ \ \	ta)	AMPAPSAILIO IISA SOSIIO
Rice	Transplanting	Kharif Rice	♣ Land preparation is done by
	stage	1 2	ploughing, harrowing, and levelling
	\		the field to make it suitable for
	1 1	~ /	crop establishment.
	) )		Ploughing should be done 3-4
		SERCHHIP	weeks prior to sowing.
		V L	After ploughing, harrowing the field should be done twice, with one
	<u> </u>		week gap between the two. First
			harrowing should be done after 1
			week of ploughing. The second
		LUNGLEI	harrowing should be done across
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	New York I W York New House	the first harrowing.
	1	( )	♣ Under good management and
	1,		adequate nitrogen levels, the
			optimum spacing for rice varieties
		1 4 6	should be around 20x15 cms both
			for kharif and rabi crops.
			Transplanting two to three seedlings per hill under normal
		1	conditions is enough. The use of
		LAWNGTLA	more seedlings per hill, besides not
		SAIHA	being any additional advantage,
		_	involves an extra expense on
			seedlings. In case of transplanting
		4 1 3	
		4	7   Page

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				1/11.1111
				with old seedlings, the number of
			_	seedlings per hill can be increased.
			4	Remove the tip of rice seedling
	( )	/		which reduces stem borer
	) \			infestation.
Maize	Sowing stage	/\	4	Pre-emergence application of
		KOLASIB	N. James	Atrazine (Atratraf 50 wp, Gesaprim
	1			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-large effective way for
	MAMIT	1 )		control of many annual and broad
	(	)	A	leaved weeds
	\ \	AIZAWL	CHAM	Remove unwanted plant near base
	\	f \		of the plant and cut dead
	\	5 5		branches.
	\ \		4	Earting up of soil along with
	١ ,			fertilizer mixture.
	\ \	( )	\ <del>\</del>	Foliar spray of 0.1 % Endosulfan {2
	1/	050000		ml (35 EC) in litre water} at 30
		SERCHH	IP (	days after germination is very
		V Ca	- 17	effective against stem borer.
Ginger and	Land		4	Remove unwanted plant near base
turmeric	preparation		_ (^^	of the plant and cut dead
				branches.
		LUNGLEI		Pre-emergence application of
	>	No. 507 E SE SOF Bio Book		Atrazine (Atratraf 50 wp, Gesaprim
	1	<u> </u>	- (	500 fw) @ of 1.0-1.5 kg a.i ha-1in
	1	\ \ \ \ \ \ \	-	600 litre water, Alachlor (Lasso) @
		111	- }	2-2.5 kg a.i ha-1, Metolachlor
			1	(Dual) @ 1.5-2.0 kg a.i ha-1,
			- 1	Pendamethalin (Stomp) @ 1-1.5 kg
		1 5 4	γ.	a.i. ha-large effective way for
			L	control of many annual and broad
		LAMBIOTIALA	1	leaved weeds.
		LAWNGTLAL	4	Earting up of soil along with
		SAIHA	1	fertilizer mixture.
		Thrips	_ (**	Spray Roger or Monocrotophos (2.5
				ml/lt) for controlling thrips.
			١.	

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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 (	
	<u></u>	Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF
	1		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)	<ul> <li>Black Quarter Vaccine (BQV).</li> </ul>
	₹		Primary vaccination 6 month or
	/ MAMIT	1	above
	5	AIZAWI CH	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth
	)		and R ₂ B vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat



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### **Expert committee members:**

Dr. S.B. Singh	1:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	3	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi	1	Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta		Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh		Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	7	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr. Lungmuana		Scientist (Soil Fertility)	lmsingson@gmail.com
Dr Y. Ramakrishna	J:	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	1:5	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	¶ :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1:	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	<u> </u>

# **Collaborating Department:**

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

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