

#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



Dated: 25th November, 2014

District: Chhimtuipui Period: 26 - 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	26	25	25	26	26
Min Temp (oC)	4	2	2	3	5
Cloud Coverage	Clear sky				
Max RH (%)	100	100	99	99	97
Min RH (%)	25	18	15	17	21
Wind Speed (KmpH)	6	7	7	4	5
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

	1		( )	
Weather sum	mary of the p <mark>ast</mark>	Weather forecast valid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	ee days		November, 2014.	
		and minimum temperat and 2-5°C. Maximum r 100% and minimum r easterly with the wind s during the next five day	ght rainfall during the next 5 day. The maximum ures for the next 5 days may range for 25-26°C elative humidity is expected in the range of 97-may from 15-25%. Wind direction would be peed of 4-7 km per hour. Clear sky will prevail s.	
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal	
Animal	Singe	Pest/ Diseases	husbandry advisories	
/Fisheries		SAIHA	massard y day 1501 les	
Khasi	Vegetative stage	<b>Can</b> ker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>	
Mandarin			• Wound dressing with Bordeaux paste and	

1 | Page

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)



			mulch with dry grass to conserve moisture and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
		/	copperoxycholoride 8 g /10 lt of water.
	) \		• Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	W. )	single place.
	5		✓ Remove sword sucker and use it as new
	1	STATE OF	planting material.
			✓ Excess water removes from the base of the
	\$		plant.
	7 MAMIT	4	✓ Fertilizer application in split dose of
	3	AIZAVIL (C	recommended dose.
			✓ Harvest fruits when the flower tips of the fruit dehiscent.
Pineapple	Vegetative stage	(	<ul><li>Clean the vicinity of plants by weeding and</li></ul>
1 meapple	vegetative stage	120	loosen up the soil.
	) 6		o Remove slips and use it as a new planting
	) )		material.
		SERCHHI	Sucker dipping treatment with Bavistin @
		V	3g + Chloropyriphos @ 1 g/lt of water to
	L,		protect against soil borne disease and
			insect.
			Weeding and intercultural operation.
Cucurbits	Vegetative stage	LUNGLEI	The seedling should be transplant at 2 leaf
	3		stage.
	V	500	Distance should be (50X 70 cm)
		A	In case of dry spell use supplementary
		2 \	irrigation. FYM application @400gm/pit along with
			recommended fertilizer dose 100:50:50
		1 53 4	kg/ha
		Damping off and	Seed treatment with thiram 3g/kg seed or
		LAWABlight	Trichoderma viride 4g+ metalaxyl 4g
		SAIHA	(Apron)/ kg seed
			✓ Drenching 1% Bordeaux mixture or 2 g
		ſ	captan or 3 copper oxychloride/ lt of water

2 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			at 10-15 DAS are effective.
Brinjal	Fruiting stage		<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
	3 1	1	recommended dose.
		V Company of the Comp	<ul> <li>Draining of excess water and preparation</li> </ul>
		KOLASIB \_	mound near the base.
	1	Disease:	✓ Seed treatment with captan, thiram or
	1	Damping off-	chlorothalonil will effectively control this
	7	(	disease.
	7	Pest:	✓ Sulfur fungicides can be used to control
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage	1	Trilling into bower structure.
	2		Weeding near the plant
	3	AIZAVIL C	Draining of excess water and preparation
			mound near the base.
	\	Scab and leaf blight	✓ Use of resistant varieties.
	\	disease	
Early Cole crop	Vegetative stage	Land preparation	✓ Main land preparation for cabbage,
	) )		cauliflower, broccoli and knolkhol.
		SERCHHI	Plough the field 3-4 times.
		V~1_	Planting distance, plant to plant 45 cm
	(		and row to row (60-70) cm
		0.00	Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )
		D	Fertilizer application 180:50:50 kg/ha.
		Damping off	Seed treatment with thiram 3g/kg seed or
	>	HUMEHU	Trichoderma viride 4g+ metalaxyl 4g
	1		(Apron)/ kg seed
	4	A 1 ~	✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		Tylusiai u Sawiiy	in nursery is quite effective.
Mustard and	Sowing		Seed should be sown in rows 30 cm apart
toria	bowing		by drill or pora. The seed should be placed
wia		LAWNGTLAN	at 2 to 3 cm denth. In case the moisture in
		/ SAIHA	the soil is insufficient, the seed may be
			mixed with moist soil and kept overnight
		1 5	for soaking.
		10 17 7	

3 | P a g e

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)



			✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be
	}	7	<ul><li>mixed with moist soil and kept overnight for soaking.</li><li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li></ul>
Tomato	Nursery stage	Land preparation	✓ Nursery preparation for tomato.
Tomato	Transely stage	AIZAWL	Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)
		Damping off SERCHHI	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
	1	Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage	N P	One hand weed will require.  Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

4 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			population reaches ETL of 1 nymph or adult/ hill.
	5	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	5	Reproductive	
	<u>}</u>	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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

V.

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi		Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	1	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	1	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna		Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	\$	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	(:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	4	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	(

### **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

LAWNGTLAL

SAIHA

6 | Page

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)



strict: Kolasib Period: 26-30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

	10,345 10,710	F-0			
Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	26	25	25	25	24
Min Temp (oC)	6	Λ 5	4	3	3
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	98	98	98	98	98
Min RH (%)	46	40	37	35	34
Wind Speed (KmpH)	3	5	4	3	2
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

(-28.00)

Kolasib- 372.1mm (19.16)

Champhai- 329.7mm

**Mamit-376.0** mm (-20.69)

Aizawl-378.0mm (7.33)

Dated: 25th November, 2014

Serchhip- 166.7 mm (-32.04)

Lawngtalia- 365.4 mm Lunglei- 371.4 mm (-64.68)

(-16.55)

Chhimtuipui- 367.8 mm (-32.04)

### Weather summary of the past three days

The temperature range for maximum and minimum were 28.1-29.6°C and 14.1-17.2°C respectively. Clean sky was observed. Wind direction is easterly. Maximum RH observed 65-68% & minimum of 22-24%. Rainfall recorded for the past three days is 00.0mm.

### Weather forecast valid from 26<sup>th</sup> November, 2014 To 30<sup>th</sup> November, 2014.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 24-26<sup>0</sup>C and 3-6°C. Maximum relative humidity is expected in the range of 98% and minimum may from 34-46%. Wind direction would be easterly with the wind speed of 2-5 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm

0000		101	Julia Sala Zizizi
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal
Animal		Pest/ Diseases	husbandry advisories
/Fisheries		/ SAIHA	\
Khasi	Vegetative stage	<b>Can</b> ker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>
Mandarin			• Wound dressing with Bordeaux paste and

1 | Page

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)



			alch with dry grass to conserve moisture d suppress the growth of weed.
			r canker, spray streoptomycin 2g +
			pperoxycholoride 8 g /10 lt of water.
	) \		cess water removes from the base of the
		No. of the contract of the con	ınt.
Banana	Vegetative/		move water sucker, keep 1 or 2 plants in a
	harvesting		gle place.
	5		move sword sucker and use it as new
	1		inting material.
			cess water removes from the base of the
	Summer	pla	
	7 MAMIT		rtilizer application in split dose of
	3	ACCURAGE AND ADMINISTRATION OF A 1 P. S.	commended dose.
		- A-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-	rvest fruits when the flower tips of the it dehiscent.
Dinconnlo	Vegetative stage		lean the vicinity of plants by weeding and
Pineapple	vegetative stage		osen up the soil.
	) &		emove slips and use it as a new planting
	) )		aterial.
			icker dipping treatment with Bavistin @
	1	The Control of the Co	g + Chloropyriphos @ 1 g/lt of water to
			otect against soil borne disease and
		in	sect.
		o W	eeding and intercultural operation.
Cucurbits	Vegetative stage	LUNGLEI + TI	he seedling should be transplant at 2 leaf
	3	st	age.
	V.	A CARLO DE LA CARLO DEL CARLO DE LA CARLO DE LA CARLO DEL CARLO DE LA CARONDO DE LA CARLO	vistance should be (50X 70 cm)
		CONTRACTOR OF THE PROPERTY OF	case of dry spell use supplementary
			rigation.
		The state of the s	YM application @400gm/pit along with ecommended fertilizer dose 100:50:50
			g/ha
			eed treatment with thiram 3g/kg seed or
			richoderma viride 4g+ metalaxyl 4g
			Apron)/ kg seed
			renching 1% Bordeaux mixture or 2 g
			aptan or 3 copper oxychloride/ lt of water
	·		

2 | Page

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage		❖ Weeding near the plant
•			❖ Fertilizer application in split dose of
	7 1	1	recommended dose.
	1 1		<ul> <li>Draining of excess water and preparation</li> </ul>
		KOLASIB	mound near the base.
	\	Disease:	✓ Seed treatment with captan, thiram or
	1	Damping off-	chlorothalonil will effectively control this
	>		disease.
	1	Pest:	✓ Sulfur fungicides can be used to control
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage		♣ Trilling into bower structure.
	J. IIII AMALI	1	Weeding near the plant
	3	AIZAVVL 10	Draining of excess water and preparation
			mound near the base.
	1	Scab and leaf blight	✓ Use of resistant varieties.
	4	disease	
Early Cole crop	Vegetative stage	Land preparation	✓ Main land preparation for cabbage,
	A 5		cauliflower, broccoli and knolkhol.
		SERCHHI	Plough the field 3-4 times.
		ockenni	Planting distance, plant to plant 45 cm
	A STATE OF THE STA		and row to row (60-70) cm
	7		Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )
			Fertilizer application 180:50:50 kg/ha.
		Damping off	Seed treatment with thiram 3g/kg seed or
		LUNGLEI	Trichoderma viride 4g+ metalaxyl 4g
	3		(Apron)/ kg seed
	V	5	✓ Drenching 1% Bordeaux mixture or 2 g
		A	captan or 3 copper oxychloride/ lt of water
		2	at 10-15 DAS are effective.
	Í	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		1 63 3	in nursery is quite effective.
Mustard and	Sowing	Y Y	Seed should be sown in rows 30 cm apart
toria		LAWNGTLAN	by drill or pora. The seed should be placed
		SAIHA	at 2 to 3 cm depth. In case the moisture in
		( SAIDA	the soil is insufficient, the seed may be
			mixed with moist soil and kept overnight
		12 1	for soaking.
		L 1 2 3	· · · · · · · · · · · · · · · · · · ·

3 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





4 | P a g e

		1	✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	<ul> <li>✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.</li> <li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li> </ul>
Tomato	Nursery stage IT	Land preparation	<ul> <li>✓ Nursery preparation for tomato.</li> <li>Raised bed, nursery bed solarisation.</li> <li>Bed should be 1m width and conventional length.</li> <li>Application of FYM (1.5-2.0 kg/ m²)</li> <li>Line sowing of seeds (7-10cm)</li> </ul>
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage	175	✓ One hand weed will require. ✓ Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/ hill.
		Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	5	Reproductive	
	}	Respiratory	Į.
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	7 MAMIT	3	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	1	1 -8 V	<ul> <li>Primary vaccination 6 month or above</li> </ul>
	1	( ) >0	<ul> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	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	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna	:	Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	\$	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	(:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	(

### **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

LAWNGTLAL

3

6 | P a g e

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)



Dated: 25thNovember, 2014

District: Lawntalai Period: 26 - 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0.00	0	0	0
Max Temp (oC)	26	25	26	26	26
Min Temp (oC)	6	5	5	5	7
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	98	97	96	95	92
Min RH (%)	34	28	25	24	27
Wind Speed (KmpH)	7	7	7	5	6
Wind Direction	Е	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

Weather sum	mary of the past	Weather forecast valid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	e days		November, 2014.	
		There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 25-26°C and 5-7°C. Maximum relative humidity is expected in the range of 92-98% and minimum may from 24-34%. Wind direction would be northeasterly with the wind speed of 5-7km per hour. Clear sky will prevail during the next five days.  *Weekly cumulative rainfall: 00.0 mm*		
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories	
Khasi Mandarin	Vegetative stage	Canker	<ul> <li>Prune the diseased and dead twigs.</li> <li>Wound dressing with Bordeaux paste and</li> </ul>	

1 | Page

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)



2 | Page

And suppress the growth of weed.  • For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.  • Excess water removes from the base of the plant.  ✓ Remove water sucker, keep 1or 2 plants in a single place.  ✓ Remove sword sucker and use it as new planting material.  ✓ Excess water removes from the base of the plant.  ✓ Fertilizer application in split dose of recommended dose.  ✓ Harvest fruits when the flower tips of the fruit dehiscent.  o Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  SERCHIP O Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect / against soil borne disease and insect.  Cucurbits  Vegetative stage  UNGLE:  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.  FYM application @400gm/pit along with			mulch with dry grass to conserve moisture
Banana  Vegetative/ harvesting  Vegetative/ harvesting  Vegetative/ harvesting  Vegetative/ harvesting  Vegetative/ harvesting  Pineapple  Vegetative stage  Vegetative stage  Cucurbits  Vegetative stage  Cucurbits  Cucurbits  Vegetative stage  Cucurbits  Cucurbits  Cucurbits  Cucurbits  Cucurbits  Vegetative/ harvesting  Vegetative/ harvesting  Cucurbits  Cucurbits  Cucurbits  Cucurbits  Cucurbits  Vegetative stage  Cucurbits  Cucurbits			and suppress the growth of weed.
• Excess water removes from the base of the plant.  Vegetative/ harvesting  Ammit  Pineapple  Vegetative stage  Vegetative stage  • Excess water removes from the base of the plant.  Femove sword sucker and use it as new planting material.  Excess water removes from the base of the plant.  Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  In case of dry spell use supplementary irrigation.			
Banana  Vegetative/ harvesting  Plant.  Remove water sucker, keep 1 or 2 plants in a single place.  Remove sword sucker and use it as new planting material.  Excess water removes from the base of the plant.  Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  LUNGLE  In case of dry spell use supplementary irrigation.		3 1	
Vegetative/harvesting			We consider the same of the sa
single place.  Remove sword sucker and use it as new planting material.  Excess water removes from the base of the plant.  Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  LUNGLE  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.	Banana	Vegetative/	
<ul> <li>✓ Remove sword sucker and use it as new planting material.</li> <li>✓ Excess water removes from the base of the plant.</li> <li>✓ Fertilizer application in split dose of recommended dose.</li> <li>✓ Harvest fruits when the flower tips of the fruit dehiscent.</li> <li>O Clean the vicinity of plants by weeding and loosen up the soil.</li> <li>O Remove slips and use it as a new planting material.</li> <li>O Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.</li> <li>✓ Weeding and intercultural operation.</li> <li>Cucurbits</li> <li>Vegetative stage</li> <li>The seedling should be transplant at 2 leaf stage.</li> <li>Distance should be (50X 70 cm)</li> <li>In case of dry spell use supplementary irrigation.</li> </ul>		<u> </u>	
Fineapple  Vegetative stage  Excess water removes from the base of the plant.  Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		(	✓ Remove sword sucker and use it as new
plant.  Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		<b></b>	planting material.
Fertilizer application in split dose of recommended dose.  Harvest fruits when the flower tips of the fruit dehiscent.  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  Lings:  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		1	✓ Excess water removes from the base of the
Pineapple  Vegetative stage  O Clean the vicinity of plants by weeding and loosen up the soil. Remove slips and use it as a new planting material. Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect. Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage. Distance should be (50X 70 cm) In case of dry spell use supplementary irrigation.		£	plant.
Pineapple  Vegetative stage  Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  UNGLE  Vegetative stage  In case of dry spell use supplementary irrigation.		7 MAMIT	✓ Fertilizer application in split dose of
Pineapple  Vegetative stage  O Clean the vicinity of plants by weeding and loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  Vegetative stage  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		5	A BELLEVILLE OF THE STATE OF TH
Pineapple  Vegetative stage  Clean the vicinity of plants by weeding and loosen up the soil. Remove slips and use it as a new planting material. Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect. Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage. Distance should be (50X 70 cm) In case of dry spell use supplementary irrigation.		1	Harvest fruits when the flower tips of the
loosen up the soil.  Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		)	
Cucurbits  O Remove slips and use it as a new planting material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.	Pineapple	Vegetative stage	
material.  Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.			
SERCHHOO Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		1	
3g + Chloropyriphos @ 1 g/lt of water to protect against soil borne disease and insect.  Weeding and intercultural operation.  Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.			
protect against soil borne disease and insect.  Weeding and intercultural operation.  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.			A CALL OF THE PARTY OF THE PART
Cucurbits  Vegetative stage  Vegetative stage  Under the stage insect.  Weeding and intercultural operation.  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		\ \ \	
Cucurbits  Vegetative stage  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		7	
Cucurbits  Vegetative stage  The seedling should be transplant at 2 leaf stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.		j.	
stage.  Distance should be (50X 70 cm)  In case of dry spell use supplementary irrigation.	Cucurhits	Vegetative stage	The sealth at the transfer of 2 leef
Distance should be (50X 70 cm) In case of dry spell use supplementary irrigation.	Cucuibits	regetative stage	10-11-1 (-10-10-10-10-10-10-10-10-10-10-10-10-10-
In case of dry spell use supplementary irrigation.		-	
irrigation.		4	
recommended fertilizer dose 100:50:50			
kg/ha			
Damping off and ✓ Seed treatment with thiram 3g/kg seed or			<b>Damping off and</b> ✓ Seed treatment with thiram 3g/kg seed or
Trichoderma viride 4g+ metalaxyl 4g			
SAIHA (Apron)/ kg seed			1 , 0
✓ Drenching 1% Bordeaux mixture or 2 g			
captan or 3 copper oxychloride/ lt of water			captan or 3 copper oxychloride/ lt of water

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage		<ul> <li>Weeding near the plant</li> </ul>
•			❖ Fertilizer application in split dose of
	7 1	1	recommended dose.
	1 1		<ul> <li>Draining of excess water and preparation</li> </ul>
		KOLASIB	mound near the base.
	(	Disease:	✓ Seed treatment with captan, thiram or
	1	Damping off-	chlorothalonil will effectively control this
	>		disease.
	7	Pest:	✓ Sulfur fungicides can be used to control
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage		♣ Trilling into bower structure.
	A HIBANNI I	1	Weeding near the plant
	3	AIZAVVL 10	Draining of excess water and preparation
			mound near the base.
	1	Scab and leaf blight	✓ Use of resistant varieties.
		disease	
Early Cole crop	Vegetative stage	Land preparation	✓ Main land preparation for cabbage,
	A 5		cauliflower, broccoli and knolkhol.
		SERCHHI	♣ Plough the field 3-4 times.
		ockenni	Planting distance, plant to plant 45 cm
	N. Carlotte		and row to row (60-70) cm
	7		Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )
			Fertilizer application 180:50:50 kg/ha.
		Damping off	Seed treatment with thiram 3g/kg seed or
		LUNGLEI	Trichoderma viride 4g+ metalaxyl 4g
	-		(Apron)/ kg seed
	V.	5	Drenching 1% Bordeaux mixture or 2 g
		A	captan or 3 copper oxychloride/ lt of water
		2	at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
	<u> </u>	1 63 3	in nursery is quite effective.
Mustard and	Sowing	Y Y	Seed should be sown in rows 30 cm apart
toria		LAWNGTLAN	by drill or pora. The seed should be placed
		SAIHA	at 2 to 3 cm depth. In case the moisture in
		( SAIDA	the soil is insufficient, the seed may be
			mixed with moist soil and kept overnight
		1211	for soaking.
		10 1	

3 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be
	}		<ul><li>mixed with moist soil and kept overnight for soaking.</li><li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li></ul>
Tomato	Nursery stage	Land preparation	✓ Nursery preparation for tomato.
		AIZAWL	Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)
		Damping off SERCHHI	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
	1	Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage		✓ One hand weed will require. ✓ Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

4 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/hill.
	57	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB &	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	}	Reproductive 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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi		Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	1	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	1	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna		Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	\$	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	4	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	7

### **Collaborating Department:**

D I I		DO MANA 1	1 11 110 11
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

LAWNGTLAL

SAIHA

6 | Page

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)



Dated: 25th November, 2014

District: Lunglei Period: 26- 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0.00	0	0	0
Max Temp (oC)	26	25	25	25	25
Min Temp (oC)	5	4	3	2	3
Cloud Coverage	Clear sky				
Max RH (%)	99	99	98	98	97
Min RH (%)	36	29	26	24	26
Wind Speed (KmpH)	5	6	6	3	4
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

Weather sum	mary of the past	Weather forecast valid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	e days	November, 2014.		
		There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 25-26°C and 2-5°C. Maximum relative humidity is expected in the range of 97-99% and minimum may from 24-36%. Wind direction would be easterly with the wind speed of 3-6 km per hour. Clear sky will prevail during the next five days.  Weekly cumulative rainfall: 00.0 mm		
Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases  Agricultural / Horticult husbandry advis		
Khasi Mandarin	Vegetative stage	Canker  • Prune the diseased and dea  • Wound dressing with Bo	C	

1 | Page

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)



			mulch with dry grass to conserve moisture and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
		/	copperoxycholoride 8 g /10 lt of water.
	) \	2	• Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	W.	single place.
	5		✓ Remove sword sucker and use it as new
	1	530000	planting material.
		5	✓ Excess water removes from the base of the
	\$		plant.
	7 MAMIT	4	Fertilizer application in split dose of
	1	A AIZAVVL C	recommended dose.
			✓ Harvest fruits when the flower tips of the fruit dehiscent.
Pineapple	Vegetative stage	- (	<ul> <li>Clean the vicinity of plants by weeding and</li> </ul>
Ппсарріс	vegetative stage	120	loosen up the soil.
	) 6		Remove slips and use it as a new planting
	) )		material.
		SERCHHIE	Sucker dipping treatment with Bavistin @
		V	3g + Chloropyriphos @ 1 g/lt of water to
	\	L	protect against soil borne disease and
			insect.
			o Weeding and intercultural operation.
Cucurbits	Vegetative stage	LUNGLEI	The seedling should be transplant at 2 leaf
	1		stage.
		500	Distance should be (50X 70 cm)
		A	In case of dry spell use supplementary irrigation.
		P \_ \	FYM application @400gm/pit along with
			recommended fertilizer dose 100:50:50
			kg/ha
		Damping off and	Seed treatment with thiram 3g/kg seed or
		LAWABlight	Trichoderma viride 4g+ metalaxyl 4g
		P SAIHA	(Apron)/ kg seed
			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water

2 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			at 10-15 DAS are effective.
Brinjal	Fruiting stage	KOLASIB	<ul> <li>Weeding near the plant</li> <li>Fertilizer application in split dose of recommended dose.</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	}	Disease: Damping off-	<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this disease.</li> </ul>
		Pest: Mites and hoppers-	✓ Sulfur fungicides can be used to control this pest.
Cowpea	Fruiting stage	AIZAVVL	<ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	1	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Land preparation	<ul> <li>✓ Main land preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Plough the field 3-4 times.</li> <li>♣ Planting distance, plant to plant 45 cm and row to row (60-70) cm</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Fertilizer application 180:50:50 kg/ha.</li> </ul>
	1	Damping off	Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.
Mustard and toria	Sowing	LAWNGTLAL	Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in
		1 1	2   D o c o

3 | Page

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)



4 | P a g e

Tomato  Nursery stage  Land preparation  Nursery stage  Damping off  Damping off  Damping off  At the time of sowing  Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.  Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing  Vivin Nursery preparation for tomato.  Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g  (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/lt of water at 10-15 DAS are effective.				✓	Full amount of phosphorus and potash and
Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.   Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing.   Full amount of nitrogen should be applied at the time of sowing.   Raised bed, nursery bed solarisation.   Bed should be Im width and conventional length.   Application of FYM (1.5-2.0 kg/ m²)     Line sowing of seeds (7-10cm)     Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed     Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ it of water at 10-15 DAS are effective.     Captan of 1 copper oxychloride/ it of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.     Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.     Application of split dose of Urea.     Postroy egg masses.     Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water or Imidacloprid 20ml/10lt water     Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml					half amount of nitrogen should be applied
by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.  Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing  Tomato  Nursery stage   Land preparation  Nursery stage   Land preparation  Raised bed, nursery bed solarisation.  Ra	Pea	Sowing	1	<b>√</b>	
at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.  Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing  Nursery stage!  Land preparation  Nursery stage!  Land preparation  Nursery preparation for tomato.  Raised bed, nursery bed solarisation.  Bed should be Im width and conventional length.  Application of FYM (1.5-2.0 kg/m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Orenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ It of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  One hand weed will require.  Application of split dose of Urea.  Poestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 3 6 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml	I cu	Downing .	2		
the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.  Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing  Tomato  Nursery stage   Land preparation    Nursery preparation for tomato.  Raised bed, nursery bed solarisation.  Bed should be Im width and conventional length.  Application of FYM (1.5-2.0 kg/m²)  Line sowing of seeds (7-10cm)  Damping off   Sercetted    Sercetted   Sercetted    Damping off   Sercetted    Leaf spot and leaf blotch   Damping 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ It of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Vone hand weed will require.  Application of split dose of Urea.  Rice Stem borer   Destroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml			KOLASIB		• •
Tomato  Nursery stage  Land preparation  Nursery stage  Land preparation  Nursery stage  Land preparation  Nursery preparation for tomato.  Raised bed, nursery bed solarisation.  Bed should be Im width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g  (Apron)/ kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Leaf spot and leaf blotch  Leaf spot and leaf captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  One hand weed will require.  Application of split dose of Urea.  Pestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/lt		l l	MODINGID X		
Tomato  Nursery stage   Land preparation  Nursery stage   Land preparation  Nursery stage   Variety   Vari		2	(A)		
Nursery stage   Land preparation   Against the time of sowing		5	2		
Tomato  Nursery stage   Land preparation   Nursery preparation for tomato.  Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  One hand weed will require.  Application of split dose of Urea.  Rice Stem borer  Bestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/ht or endosulfan 35 EC @ 1.5 ml/ht		<i>f</i>	STATE	✓	
Tomato  Nursery stage □  Land preparation  Raised bed, nursery bed solarisation.  Raised bed, nurser bed solarisation.  Raised self.  Raised bed, nurser bed solarisation.  Raised self.  Raised bed, nurser bed solarisation					
Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g  (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Vone hand weed will require.  Application of split dose of Urea.  Poestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/lml	Tomata	Nurcory stogo	I and propagation	<b>√</b>	
Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Rice Flowering Stage  Rice Stem borer  Rice Stem borer  Rice Stem borer  Gundhi bug HA  Spray monocrotophos 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ltl	Tomato	ruisely stage	And the second s		Raised bed nursery bed solarisation
conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Vone hand weed will require.  Application of split dose of Urea.  Poestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug all A  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		3	( AIZAVIL ) O	HA	
# Application of FYM (1.5-2.0 kg/ m²)  # Line sowing of seeds (7-10cm)  Damping off  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Dear of Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Pohenand weed will require.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g  (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g  captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  One hand weed will require.  Application of split dose of Urea.  Destroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/lml		\			
Damping off  Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Poetroy egg masses.  Rice Stem borer  Rice Stem borer  Rice Stem borer  Bestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		1			
Trichoderma viride 4g+ metalaxyl 4g (Apron)/kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Flowering Stage  Rice Stem borer  Rice Stem borer  Rice Stem borer  Brice Stem borer  Cundhi bug HA  Spray monocrotophos 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		1	( )/0		♣ Line sowing of seeds (7-10cm)
Capron)/kg seed   Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.		10	Damping off	<b>√</b>	
Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Poestroy egg masses.  Rice Stem borer  Rice Stem borer  Rice Stem borer  Birce Stem borer  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		12		. 7	
captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  Leaf spot and leaf blotch  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Flowering Stage  Rice Stem borer  Rice Stem borer  Rice Stem borer  Bull to see the borer  Poestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml			SERCHHI		
at 10-15 DAS are effective.  Leaf spot and leaf blotch  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Rice Flowering Stage  ✓ One hand weed will require. ✓ Application of split dose of Urea.  Rice Stem borer  Destroy egg masses. Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug HA  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		1	10 1-3	* 1	
Leaf spot and leaf blotch  Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  ✓ One hand weed will require. ✓ Application of split dose of Urea.  Rice Stem borer  Bestroy egg masses. Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug HA Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		7	and the second	-2	
water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Rice Flowering Stage  Plowering Stage  Rice Stem borer  Rice Stem borer  Bestroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		- 1	Leaf spot and leaf	0	
sprayings should be given forthnightly intervals.  Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  **Note** Plowering Stage**  **Destroy egg masses.  **Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  **Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		/	blotob	3	
O Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.  Rice Flowering Stage  ✓ One hand weed will require. ✓ Application of split dose of Urea.  Pestroy egg masses. Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug HA  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		>	CHNOCEL	7	sprayings should be given forthnightly
Flowering Stage  Flowe		\ \frac{1}{2}	cec :		
Rice Flowering Stage  ✓ One hand weed will require. ✓ Application of split dose of Urea.  Rice Stem borer  Destroy egg masses.  Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug HA  Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml		<b>\</b>	0 (~	0	· · ·
Application of split dose of Urea.  Rice Stem borer  Destroy egg masses. Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug HA Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml	7.	T1 . C1	3		
Rice Stem borer  Destroy egg masses. Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug AHA Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml	Rice	Flowering Stage	1000		
Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.  Gundhi bug IHA Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml			Dies Stem horer	Tito.	
or Imidacloprid 20ml/10lt water.  Gundhi bug → Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml			Rice Stelli bollel		
Gundhi bugalha Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml			LAWNGTLAL		
or endosulfan 35 EC @ 1.5 ml/ml					
■ Insecticide application should be done if the					
**					Insecticide application should be done if the

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			population reaches ETL of 1 nymph or adult/ hill.
	5	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	5	Reproductive	
	7	Respiratory Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	MAMIT	Swine rever.	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	1	3 66	<ul> <li>Primary vaccination 6 month or above</li> </ul>
		1 11	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

15

SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

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

### **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

LAWNGTLAL

SAIHA

6 | Page

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)



Dated: 25th November, 2014

District: Mamit Period: 26- 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	26	25	25	25	25
Min Temp (oC)	7	6	5	4	4
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	98	97	98	97
Min RH (%)	49	43	40	38	38
Wind Speed (KmpH)	2	4	4	2	2
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

	1				
Weather sum	Weather summary of the past		ralid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	e days		November, 2014.		
		and minimum temperate and 4-7°C. Maximum re 99% and minimum may with the wind speed of the next five days.	There is no chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 25-26°C and 4-7°C. Maximum relative humidity is expected in the range of 97-99% and minimum may from 34-49%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Clear sky will prevail during the next five days.  *Weekly cumulative rainfall: 00.0 mm		
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal		
Animal		Pest/ Diseases	husbandry advisories		
/Fisheries		/ SAIHA	A		
Khasi	Vegetative stage	• Canker • Prune the diseased and dead twigs.			
Mandarin		(	Wound dressing with Bordeaux paste and		

1 | Page

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)



			mulch with dry grass to conserve moisture and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
			copperoxycholoride 8 g /10 lt of water.
	1	7	• Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/	ROLROID	✓ Remove water sucker, keep 1or 2 plants in a
	harvesting	W.	single place.
	(	1 1	✓ Remove sword sucker and use it as new
	¥	E STATE OF THE STA	planting material.
	1		✓ Excess water removes from the base of the
			plant.
	7 MAMIT	).	✓ Fertilizer application in split dose of
	5	AIZAVIL C	recommended dose.
		C meaning	✓ Harvest fruits when the flower tips of the
			fruit dehiscent.
Pineapple	Vegetative stage	3	o Clean the vicinity of plants by weeding and
		1 3 5	loosen up the soil.
	A. C		o Remove slips and use it as a new planting
	11	ocnount	material.
		SERCHHIE	
			3g + Chloropyriphos @ 1 g/lt of water to
	3	5	protect against soil borne disease and
			insect.  Weeding and intercultural operation.
Cucurbits	Vegetative stage	OUMPESTERS	The seedling should be transplant at 2 leaf
Cucuibits	vegetative stage	LUNGLEI	stage.
	1		Distance should be (50X 70 cm)
	7	A 8~	In case of dry spell use supplementary
			irrigation.
			FYM application @400gm/pit along with
		8 1 5 7 3	recommended fertilizer dose 100:50:50
			kg/ha
		Damping off and	✓ Seed treatment with thiram 3g/kg seed or
		LAW Blight	Trichoderma viride 4g+ metalaxyl 4g
		/ SAIHA	(Apron)/ kg seed
			✓ Drenching 1% Bordeaux mixture or 2 g
		Cas I	captan or 3 copper oxychloride/ lt of water

2 | P a g e

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage	KOLASIB	<ul> <li>Weeding near the plant</li> <li>Fertilizer application in split dose of recommended dose.</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	}	Disease: Damping off-	<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this disease.</li> </ul>
		Pest: Mites and hoppers-	✓ Sulfur fungicides can be used to control this pest.
Cowpea	Fruiting stage	AIZAVVL	<ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	1	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Land preparation	<ul> <li>✓ Main land preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Plough the field 3-4 times.</li> <li>♣ Planting distance, plant to plant 45 cm and row to row (60-70) cm</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Fertilizer application 180:50:50 kg/ha.</li> </ul>
		Damping off	Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.
Mustard and toria	Sowing	LAWNGTLAL	Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in
		10 X V	2   D o c o

3 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be
	}		<ul><li>mixed with moist soil and kept overnight for soaking.</li><li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li></ul>
Tomato	Nursery stage	Land preparation	✓ Nursery preparation for tomato.
		AIZAWL	Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)
		Damping off SERCHHI	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
	1	Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage		✓ One hand weed will require. ✓ Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

4 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/hill.
	57	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB &	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	}	Reproductive 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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi		Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	1	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	1	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna		Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	\$	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	4	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	7

### **Collaborating Department:**

D I I		DO MANA 1	1 11 110 11
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

LAWNGTLAL

SAIHA

6 | Page

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)



Dated: 25th November, 2014

District: Serchhip Period: 26- 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	26	25	25	25	25
Min Temp (oC)	3	<u> </u>	2	1	1
Cloud Coverage	Clear sky				
Max RH (%)	100	100	100	100	100
Min RH (%)	31	23	20	18	21
Wind Speed (KmpH)	5	6	6	2	3
*Wind Direction	E	E	E	E	E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

	1			
Weather summary of the past		Weather forecast valid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	three days		November, 2014.	
		There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 25-26°C and 1-3°C. Maximum relative humidity is expected in the range of 100% and minimum may from 18-31%. Wind direction would be easterly with the wind speed of 2-6 km per hour. Clear sky will prevail during the next five days.  Weekly cumulative rainfall: 00.0 mm		
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural / animal	
Animal /Fisheries		Pest/ Diseases	husbandry advisories	
Khasi	Vegetative stage	Canker	Prune the diseased and dead twigs.	
Mandarin			• Wound dressing with Bordeaux paste and	

1 | Page

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)



			mulch with dry grass to conserve moisture and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
		/	copperoxycholoride 8 g /10 lt of water.
	) \		• Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	(AA)	single place.
	5		✓ Remove sword sucker and use it as new
	1	5	planting material.
			✓ Excess water removes from the base of the
	5		plant.
	7 MAMIT	1	✓ Fertilizer application in split dose of
	3	A A ZAVVL C	recommended dose.
			✓ Harvest fruits when the flower tips of the fruit dehiscent.
Dingannla	Vegetative stage		<ul> <li>Clean the vicinity of plants by weeding and</li> </ul>
Pineapple	vegetative stage		loosen up the soil.
	) &		o Remove slips and use it as a new planting
	) )		material.
		SERCHHIP	
	1	V~ \	3g + Chloropyriphos @ 1 g/lt of water to
		L	protect against soil borne disease and
		7.0	insect.
			o Weeding and intercultural operation.
Cucurbits	Vegetative stage	LUNGLEI	The seedling should be transplant at 2 leaf
	3	ADMINISTRATION AND ADMINISTRATIO	stage.
		23	Distance should be (50X 70 cm)
		A S	In case of dry spell use supplementary
			irrigation.
		7 ( )	FYM application @400gm/pit along with recommended fertilizer dose 100:50:50
		1 63 4	kg/ha
		Damping off and	✓ Seed treatment with thiram 3g/kg seed or
		LAWABlight	Trichoderma viride 4g+ metalaxyl 4g
		SAIHA	(Apron)/ kg seed
			✓ Drenching 1% Bordeaux mixture or 2 g
			aptan or 3 copper oxychloride/ lt of water
			·

2 | Page

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage	KOLASIB	<ul> <li>Weeding near the plant</li> <li>Fertilizer application in split dose of recommended dose.</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	}	Disease: Damping off-	<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this disease.</li> </ul>
		Pest: Mites and hoppers-	✓ Sulfur fungicides can be used to control this pest.
Cowpea	Fruiting stage	AIZAVVL	<ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	1	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Land preparation	<ul> <li>✓ Main land preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Plough the field 3-4 times.</li> <li>♣ Planting distance, plant to plant 45 cm and row to row (60-70) cm</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Fertilizer application 180:50:50 kg/ha.</li> </ul>
		Damping off	Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.
Mustard and toria	Sowing	LAWNGTLAL	Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in
		L 1 3	2   D o g o

3 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		1	✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	✓ Seed should be sown in rows 30 cm apa by drill or pora. The seed should be place at 2 to 3 cm depth. In case the moisture
	{	43 1 S	the soil is insufficient, the seed may be mixed with moist soil and kept overnig for soaking.
	<i></i>	3 5	✓ Full amount of phosphorus and potash ar half amount of nitrogen should be applied at the time of sowing
Tomato	Nursery stage	Land preparation	✓ Nursery preparation for tomato.
	{	AIZAWL C	Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.
	1		<ul> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul>
	35	Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
	5	SERCHHI	✓ (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of wate at 10-15 DAS are effective.
	1	Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2 sprayings should be given forthnight intervals.
	5	A T	O Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.
Rice	Flowering Stage	100	One hand weed will require.
	9)	Rice Stem borer	Application of split dose of Urea.
		LAWNGTLAL	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	
-	*		

4 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/ hill.
	5	Leaf blast	<ul><li>Judicious application of nitrogenous fertilizer.</li></ul>
		KOLASIB	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	5	Reproductive	
	1	Respiratory	
	A 7 7/	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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	1	3 8 6	<ul> <li>Primary vaccination 6 month or above</li> </ul>
		1 30	<ul> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh		Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	13	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	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna	ŀ	Farm manager (T-6)	ramakrishna_iari@rediffmail.com
Mr. Samik Chowdhury	\$ 1	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem		Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	'n	Research Associate (Mizo	mamamralte@yahoo.com
	1	language Translator)	7

### **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

LAWNGTLAL

6 | P a g e

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)



Dated: 25th November, 2014

District: Aizawl Period: 26 -30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	MAI O CID	0	0	0
Max Temp (oC)	26	25	25	25	24
Min Temp (oC)	4	3	3	1	1
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	99	99	99	99	99
Min RH (%)	44	38	34	32	32
Wind Speed (KmpH)	3	5	4	2	2
*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 MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

Weather summary of the past three days

Weather forecast valid from 26<sup>th</sup> November, 2014 To 30<sup>th</sup> November, 2014.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 24-26<sup>0</sup>C and 4-1<sup>0</sup>C. Maximum relative humidity is expected in the range of 99% and minimum may from 32-44%. Wind direction would be southeasterly with the wind speed of 2-5 km per hour. Clear sky will prevail during the next five days.

Weekly cumulative rainfall: 00.0 mm Agricultural / Horticultural/ animal Main Crop/ **Cultural practices/** Stage Animal Pest/ Diseases husbandry advisories /Fisheries SAIHA Khasi Vegetative stage Canker • Prune the diseased and dead twigs. Mandarin Wound dressing with Bordeaux paste and

1 | Page

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)



			mulch with dry grass to conserve moisture and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
			copperoxycholoride 8 g /10 lt of water.
	1	2	• Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/	ROLROID	✓ Remove water sucker, keep 1or 2 plants in a
	harvesting	W.	single place.
	(	1	✓ Remove sword sucker and use it as new
	¥	E STATE OF THE STA	planting material.
	1		✓ Excess water removes from the base of the
			plant.
	7 MAMIT	).	✓ Fertilizer application in split dose of
	5	AIZAVIL C	recommended dose.
		C meaning	✓ Harvest fruits when the flower tips of the
			fruit dehiscent.
Pineapple	Vegetative stage	3	o Clean the vicinity of plants by weeding and
		1 3 5	loosen up the soil.
	A. C		o Remove slips and use it as a new planting
	11	ocnount	material.
		SERCHHIE	
			3g + Chloropyriphos @ 1 g/lt of water to
	3	5	protect against soil borne disease and
			insect.  Weeding and intercultural operation.
Cucurbits	Vegetative stage	OUT THE PARTY OF T	The seedling should be transplant at 2 leaf
Cucuibits	vegetative stage	LUNGLEI	stage.
	1		Distance should be (50X 70 cm)
	7	A 8~	In case of dry spell use supplementary
			irrigation.
			FYM application @400gm/pit along with
		8 1 5 7 3	recommended fertilizer dose 100:50:50
			kg/ha
		Damping off and	✓ Seed treatment with thiram 3g/kg seed or
		LAW Blight	Trichoderma viride 4g+ metalaxyl 4g
		/ SAIHA	(Apron)/ kg seed
			✓ Drenching 1% Bordeaux mixture or 2 g
		Cas II	captan or 3 copper oxychloride/ lt of water

2 | Page

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage	KOLASIB	<ul> <li>Weeding near the plant</li> <li>Fertilizer application in split dose of recommended dose.</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	}	Disease: Damping off-	<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this disease.</li> </ul>
		Pest: Mites and hoppers-	✓ Sulfur fungicides can be used to control this pest.
Cowpea	Fruiting stage	AIZAVVL	<ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>
	1	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Land preparation	<ul> <li>✓ Main land preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Plough the field 3-4 times.</li> <li>♣ Planting distance, plant to plant 45 cm and row to row (60-70) cm</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Fertilizer application 180:50:50 kg/ha.</li> </ul>
	1	Damping off	Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed  Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
		Mustard sawfly	Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.
Mustard and toria	Sowing	LAWNGTLAL	Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in
		10 X V	2   D o c o

3 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be
	}		<ul><li>mixed with moist soil and kept overnight for soaking.</li><li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li></ul>
Tomato	Nursery stage	Land preparation	✓ Nursery preparation for tomato.
		AIZAWL	Raised bed, nursery bed solarisation.  Bed should be 1m width and conventional length.  Application of FYM (1.5-2.0 kg/ m²)  Line sowing of seeds (7-10cm)
		Damping off SERCHHI	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
	1	Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage		✓ One hand weed will require. ✓ Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

4 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/hill.
	57	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB &	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	}	Reproductive 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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LUNGLE

LAWNGTLAL SAIHA

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	Scientist (Agril. Physics)	sauravs.saha@gmail.com
Dr. T. Boopathi		Scientist (Agril Entomology)	boopathiars@gmail.com
Dr. Sudip Kumar Dutta	1	Scientist (Hort.)	sudipiari@rediffmail.com
Dr. A. Ratankumar Singh	1	Scientist (Plant Pathology)	ratanplantpatho@gmail.com
Dr. L. H. Puii	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna		Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	\$	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	:	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	4	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	7

### **Collaborating Department:**

D I I		DO MANA 1	1 11 110 11
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

LAWNGTLAL

SAIHA

6 | Page

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)



Dated: 25th November, 2014.

District: Champhai Period: 26 - 30, November, 2014

Bulletin No: -469/2014/ Bulletin/English

Parameters	26-11-2014	27-11-2014	28-11-2014	29-11-2014	30-11-2014
Rainfall (mm)	0	0	0	0	0
Max Temp (oC)	25	24	24	24	24
Min Temp (oC)	5	4	3	2	2
Cloud Coverage	Mainly clear	Clear sky	Clear sky	Clear sky	Clear sky
Max RH (%)	100	100	100	100	99
Min RH (%)	42	35	33	29	27
Wind Speed (KmpH)	3	4	4	3	3
*Wind Direction	S	S-E	S-E	S	S-E

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

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

Weather sum	mary of the past	Weather forecast valid from 26 <sup>th</sup> November, 2014 To 30 <sup>th</sup>		
thre	ee days		November, 2014.	
		There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 24-25°C and 2-5°C. Maximum relative humidity is expected in the range of 100% and minimum may from 27-42%. Wind direction would be southeasterly with the wind speed of 3-4 km per hour. Clear sky will prevail during the next five days.  Weekly cumulative rainfall: 00.0 mm		
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal	
Animal		Pest/ Diseases	husbandry advisories	
/Fisheries		/ SAIHA	1	
Khasi	Vegetative stage	<b>Can</b> ker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>	
Mandarin			Wound dressing with Bordeaux paste and	

1 | Page

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





			mulch with dry grass to conserve moisture and suppress the growth of weed.
			For canker, spray streoptomycin 2g +
		/	copperoxycholoride 8 g /10 lt of water.
	) \	Z .	Excess water removes from the base of the
		KOLASIB	plant.
Banana	Vegetative/		Remove water sucker, keep 1 or 2 plants in a
	harvesting	(44)	single place.
	5		Remove sword sucker and use it as new
	1	5 6	planting material.
			Excess water removes from the base of the
	\$		plant.
	7 MAMIT	V	Fertilizer application in split dose of
	1	AIZAWL ICHA	recommended dose.
		V	Harvest fruits when the flower tips of the
Dinconnlo	Vegetative stees		fruit dehiscent.  Clean the vicinity of plants by weeding and
Pineapple	Vegetative stage		loosen up the soil.
	) &		Remove slips and use it as a new planting
	) )		material.
		SERCHHIPO	
		V~ {	3g + Chloropyriphos @ 1 g/lt of water to
	1		protect against soil borne disease and
			insect.
		0	Weeding and intercultural operation.
Cucurbits	Vegetative stage	LUNGLEI	The seedling should be transplant at 2 leaf
	3	ſ	stage.
		500	Distance should be (50X 70 cm)
		$\Omega = \Omega = \Omega$	In case of dry spell use supplementary
	11		irrigation.
			FYM application @400gm/pit along with
		1 63 8 6	recommended fertilizer dose 100:50:50
		Damping off and	kg/ha Seed treatment with thiram 3g/kg seed or
		LAW/Blight	Trichoderma viride 4g+ metalaxyl 4g
		SAIHA	(Apron)/ kg seed
			Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
		1 8	- II V

2 | Page

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)



			at 10-15 DAS are effective.
Brinjal	Fruiting stage		<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
	3 1	1	recommended dose.
		V CONTRACTOR OF THE STREET	<ul> <li>Draining of excess water and preparation</li> </ul>
		KOLASIB \_	mound near the base.
	1	Disease:	✓ Seed treatment with captan, thiram or
	1	Damping off-	chlorothalonil will effectively control this
	7	(	disease.
	7	Pest:	✓ Sulfur fungicides can be used to control
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage	1	Trilling into bower structure.
	2	1	Weeding near the plant
	3	AIZAVIL C	Draining of excess water and preparation
			mound near the base.
	\	Scab and leaf blight	✓ Use of resistant varieties.
	\	disease	
Early Cole crop	Vegetative stage	Land preparation	✓ Main land preparation for cabbage,
	) )		cauliflower, broccoli and knolkhol.
		SERCHHI	Plough the field 3-4 times.
		V~1_	Planting distance, plant to plant 45 cm
	(		and row to row (60-70) cm
		0.00	Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )
		D	Fertilizer application 180:50:50 kg/ha.
		Damping off	Seed treatment with thiram 3g/kg seed or
	>	EMMER!	Trichoderma viride 4g+ metalaxyl 4g
	1	Coc.	(Apron)/ kg seed
	4	A 1 ~	✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
		Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		Tylusiai u Sawiiy	in nursery is quite effective.
Mustard and	Sowing		Seed should be sown in rows 30 cm apart
toria	bowing		by drill or pora. The seed should be placed
ωπα		LAWNGTLAN	at 2 to 3 cm denth. In case the moisture in
		/ SAIHA	the soil is insufficient, the seed may be
			mixed with moist soil and kept overnight
		1 5	for soaking.
		10 17 7	

3 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		7	✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing
Pea	Sowing	KOLASIB	<ul> <li>✓ Seed should be sown in rows 30 cm apart by drill or pora. The seed should be placed at 2 to 3 cm depth. In case the moisture in the soil is insufficient, the seed may be mixed with moist soil and kept overnight for soaking.</li> <li>✓ Full amount of phosphorus and potash and half amount of nitrogen should be applied at the time of sowing</li> </ul>
Tomato	Nursery stage   ⊤	Land preparation	<ul> <li>✓ Nursery preparation for tomato.</li> <li>Raised bed, nursery bed solarisation.</li> <li>Bed should be 1m width and conventional length.</li> <li>Application of FYM (1.5-2.0 kg/ m²)</li> <li>Line sowing of seeds (7-10cm)</li> </ul>
		Damping off	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.
	1	Leaf spot and leaf	<ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Flowering Stage		✓ One hand weed will require. ✓ Application of split dose of Urea.
		Rice Stem borer	<ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>
		Gundhi bugatha	<ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the</li> </ul>

4 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





		A	population reaches ETL of 1 nymph or adult/ hill.
	5	Leaf blast	<ul> <li>Judicious application of nitrogenous fertilizer.</li> </ul>
		KOLASIB	<ul> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
	}	Reproductive Respiratory	7
	1	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 Disease (FMD)	• FMD vaccine at 16 week and repeat every 6 month.
	Young stage	Black Quarter (BQ)	<ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Early stage	Coccidiosis	1. Amprolium or coccidiostat

LAWNGTLAL

SAIHA

LUNGLE

5 | P a g e

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



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





### **Expert committee members:**

Dr. S.B. Singh	:	Joint Director	basantasinghsoibam@rediffmail.com
Dr. Saurav Saha	1	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	1	Scientist (Vet. Microbiology)	lpuii@gmail.com
Dr Y. Ramakrishna		Farm manager (T-6)	ramakrishna iari@rediffmail.com
Mr. Samik Chowdhury	Ś.	Technical Officer	samikchowdhury33@gmail.com
Mr. Evans Syiem	( :	Meteorological Observer	evansmeteo@gmail.com
Miss. Malsawmzuali	1	Research Associate (Mizo	mamamralte@yahoo.com
		language Translator)	(

### **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

LAWNGTLAL

SAIHA

6 | Page

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