

#### 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: 31 December, 2014 -January,

Bulletin No: -479/2014/ Bulletin/English

Date of issue: 30th December, 2014

Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	KAIOKEID	0	0	0
Max Temp (oC)	26	25	23	25	26
Min Temp (oC)	11	15	14	14	12
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly clear
Max RH (%)	85	71	94	96	98
Min RH (%)	36	44	63	57	56
Wind Speed (KmpH)	5	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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm Champhai- 0.00 mm Mamit-0.00 mm

Aizawl-0.00 mm

Serchhip-0.00mm

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

### Weather summary of the past three days

The temperature range for maximum and minimum were 17.2-24.2°C and 12.2-15.3°C respectively. Clear sky was observed. Wind direction is easterly. Maximum RH observed 55-67% & minimum of 16-28%. Rainfall recorded for the past three days is 00.0mm.

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> **January**, 2015.

There is no chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 23-26<sup>o</sup>C and 11-15°C. Maximum relative humidity is expected in the range of 71-98% and minimum may from 36-63%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Dense cloudy 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 LAWNGTLAU SAIHA	<ul> <li>Prune the diseased and dead twigs.</li> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/ harvesting		✓ Remove water sucker, keep 1 or 2 plants in a single place.
		KOLASIB	<ul> <li>✓ Remove sword sucker and use it as new planting material.</li> <li>✓ Provide irrigation to the base of the plant.</li> </ul>
	}	h )	✓ Fertilizer application in split dose of recommended dose.
	1	3 2	✓ Harvest fruits when the flower tips of the fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and loosen up the soil.
	\$	AIZAVIL	<ul> <li>Remove slips and use it as a new planting material.</li> </ul>
	}	1	<ul> <li>Sucker dipping treatment with Bavistin @</li> <li>3g + Chloropyriphos @ 1 g/lt of water to</li> </ul>
	1	( )/	protect against soil borne disease and
	25	SERCHHI	<ul><li>insect.</li><li>Weeding and intercultural operation.</li><li>Provide irrigation to the plant.</li></ul>
Cucurbits	Vegetative stage	V	Land is ploughed to a fine tilth and pits of 60 cm diameter and 30-45cm depth are
			made at a spacing of 2.0-2.5x 2.0-2.5 m, 2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
	>	LUNGLEI	pumpkin, bottle gourd cucumber respectively. Well rotten FYM should be
	1	0 8	applied in pits and filled with top soil up to 3/4th height and 2-3 seeds will be sown in
	2	Plan	each pit.  In case of chow-chow, fruit are planted
		1 37	with broad end downwards, 2/3rd portion below soil at a spacing of 3.5 x 2.0 m.
		LAWNGTLAN	Polythene nursery raising can be done/initiate
		Damping off and A Blight	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
		for East	at 10-15 DAS are effective.
Brinjal	Fruiting stage	3	<ul> <li>Weeding near the plant</li> </ul>
	) \	5	❖ Fertilizer application in split dose of
		KOLASIB	recommended dose.
	- 1	1 1100000	<ul><li>Provide irrigation to the plant.</li></ul>
		Disease:	<ul> <li>Seed treatment with captan, thiram or</li> </ul>
	(	Damping off-	chlorothalonil will effectively control this
	1		disease.
	1	Pest:	<ul> <li>Sulfur fungicides can be used to control</li> </ul>
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage	( )	Trilling into bower structure.
	5	AIZAVIL	Weeding near the plant.
		Culebrie 12	→ 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	<b>Card formation stage</b>	Application of Nitrogenous fertilizer urea
	1)		in card formation stage.
		SERCHHI	❖ Provide irrigation to the plant.
		Value,	Weeding near the plant.
	4	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
		LUNGLEI	✓ Prenching 1% Bordeaux mixture or 2 g
	3	matta etempi	captan or 3 copper oxychloride/ lt of water
	2 7	Co.	at 10-15 DAS are effective.
	<b>\</b>	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
			in nursery is quite effective.
Mustard and	Flowering stage	9 0	Weeding in the toria plot.
toria			<ul> <li>Provide irrigation in the field.</li> </ul>
		1 2	• Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAL	✓ Weeding in the pea plot.
		/ SAIHA	✓ Provide irrigation in the field.
		<b>Aphid</b>	o In case of aphid infestation apply
		l f	Imidachloprid 1.5ml/lt of water.
		and the second	

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)



Tomato	Vegetative stage	Land preparation	<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
			recommended dose.
	7.7	7	<ul> <li>Provide irrigation to the plant.</li> </ul>
	1 1	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	(		(Apron)/ kg seed
	)	(A/S)	✓ Drenching 1% Bordeaux mixture or 2 g
	5		captan or 3 copper oxychloride/ lt of water
	<u> </u>	T. 0	at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
	\$	blotch	water or Bavistin @ 1g/litre of water, 2-3
	7 MAMIT	4	sprayings should be given forthnightly intervals.
	3	AIZAWL C	o Spraying of Blitox @ 3 g/l of water was
			found effective against leaf spot.
Rice	Harvesting stage	(	✓ Harvest rice crop
Rice	Hai vesting stage		✓ Cut residue 20 cm from the base.
	) &		✓ Open the furrow with the help of furrow
	) )		opener.
		SERCHHI	✓ Place FYM and fertilizer.
		V	✓ Place the seed and cover by soil.
Pig	All stage <mark>s</mark>	Porcine	1. Culling of positive pigs or piglets.
		Reproductive	
		Respiratory	7
		Syndrome (PRRS).	- 12
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
C 41	A 11	E / IM	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
	<b>T</b> 7	Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	• Black Quarter Vaccine (BQV).
		1 5 4	Primary vaccination 6 month or above
Doultur	A dult stags	Ranikhet Disease.	Revaccination annually
Poultry	Adult stage	Kaniknet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.
	Forly store	Coccidiosis	
	Early stage	Coccidiosis	Amprolium or coccidiostat

4 | 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)



## **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

5 | 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)



District: Lawngtalai Period: 31 December, 2014 - 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

	1956 1970	FA .	1.6		
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	RAID CID	12	0	0
Max Temp (oC)	27	27	20	23	27
Min Temp (oC)	12	16	16	14	13
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Clear sky
Max RH (%)	90	93	95	95	97
Min RH (%)	34	44	85	58	50
Wind Speed (KmpH)	4	6	6	4	4
*Wind Direction	F	் ம	F	E E	NE

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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm Champha

Champhai- 0.00 mm

Mamit-0.00 mm

Aizawl-0.00 mm

Date of issue: 30th December, 2014

Serchhip-0.00mm

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Weather summary of t	the past
three days	

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 20-27°C and 12-16°C. Maximum relative humidity is expected in the range of 90-97% and minimum may from 34-85%. Wind direction would be northeasterly with the wind speed of 4-6 km per hour. Dense cloudy will prevail during the next five days.

The state of the s	ALC:		
Weekly	cumulative	rainfall	$12.0  \mathrm{mm}$

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin	Vegetative stage	Canker LAWNGTLAL SAIHA	<ul> <li>Prune the diseased and dead twigs.</li> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	KOLASIB	single place.  ✓ Remove sword sucker and use it as new planting material.
	5	L. 5	✓ Provide irrigation to the base of the plant. ✓ Fertilizer application in split dose of
	}	£ 4	recommended dose.  ✓ Harvest fruits when the flower tips of the fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and loosen up the soil.
	{	AIZAVIL C	o Remove slips and use it as a new planting material.
	1		o Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to
	10	7 7 7	protect against soil borne disease and insect.
		SERCHHI	<ul><li>Weeding and intercultural operation.</li><li>Provide irrigation to the plant.</li></ul>
Cucurbits	Vegetative stage	~~	Land is ploughed to a fine tilth and pits of 60 cm diameter and 30-45cm depth are made at a spacing of 2.0-2.5x 2.0-2.5 m, 2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUNGLEI	pumpkin, bottle gourd cucumber respectively. Well rotten FYM should be
	(	. ~	applied in pits and filled with top soil up to 3/4th height and 2-3 seeds will be sown in
	:- a	D.	each pit.
		75	In case of chow-chow, fruit are planted with broad end downwards, 2/3rd portion
		LAWNGTLAN	below soil at a spacing of 3.5 x 2.0 m.  Polythene nursery raising can be done/initiate
		Damping off and A Blight	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
		1 2 1	(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
Brinjal	Fruiting stage	3	<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
		KOLASIB	recommended dose.
			<ul> <li>Provide irrigation to the plant.</li> </ul>
	)	Disease:	<ul> <li>Seed treatment with captan, thiram or</li> </ul>
	5	Damping off-	chlorothalonil will effectively control this
		Care L	disease.
	1	Pest:	<ul> <li>Sulfur fungicides can be used to control</li> </ul>
	- E	Mites and hoppers-	this pest.
Cowpea	Fruiting stage		Trilling into bower structure.
	5	AIZAWL C	Weeding near the plant
		Cumming 1	♣ 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	Card formation stage	Application of Nitrogenous fertilizer urea
	) )		in card formation stage.
		SERCHHI	❖ Provide irrigation to the plant.
		Value of the second	Weeding near the plant.
	<b>\</b>	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
		LUNGLEI	✓ Prenching 1% Bordeaux mixture or 2 g
	3	manus et e e e e	captan or 3 copper oxychloride/ lt of water
		CV.	at 10-15 DAS are effective.
	<b>*</b>	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		3	in nursery is quite effective.
Mustard and	Flowering stage	( 5 A )	• Weeding in the toria plot.
toria			<ul> <li>Provide irrigation in the field.</li> </ul>
		1 2	• Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAND	✓ Weeding in the pea plot.
		SAIHA	✓ Provide irrigation in the field.
		<b>Aphid</b>	o In case of aphid infestation apply
		The state of	Imidachloprid 1.5ml/lt of water.
		A R	

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)



Tomato	Vegetative stage	Land preparation	❖ Weeding near the plant
			❖ Fertilizer application in split dose of
		A CONTRACTOR	recommended dose.
	7.7	/a 3	<ul><li>Provide irrigation to the plant.</li></ul>
	) \	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	- t		(Apron)/ kg seed
	)	(A)	✓ Drenching 1% Bordeaux mixture or 2 g
	\$	2 1	captan or 3 copper oxychloride/ lt of water
	<b>(</b>	Version L	at 10-15 DAS are effective.
	1	Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
		blotch	water or Bavistin @ 1g/litre of water, 2-3
	7 MAMIT	1	sprayings should be given forthnightly
	5	AIZAWL C	intervals.
	)	A	o Spraying of Blitox @ 3 g/l of water was
			Toutiu effective against leaf spot.
Rice	Harvesting stage	3 86	✓ Harvest rice crop
	\ \ \	1 3 15	✓ Cut residue 20 cm from the base.
			✓ Open the furrow with the help of furrow
	1.2	00000000	opener.
		SERCHHI	Place FYM and fertilizer.
D: a	All stores	Porcine	<ul><li>✓ Place the seed and cover by soil.</li><li>1. Culling of positive pigs or piglets.</li></ul>
Pig	All stages	Reproductive	1. Culling of positive pigs of piglets.
		Respiratory	
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	Tiddie Stage	Dwine icver.	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
	in age group	Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	1 ouing stage	Zinch Quarter (BQ)	❖ Primary vaccination 6 month or above
		1 2	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
		LAWNGTLAL	vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat
	zazy suge	COCCIONIO	

4 | 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)



## **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	i	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	4	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

5 | 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)



District: Lunglei Period: 31 December, 2014 - 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

	1976 1976	ES.	666		
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	WAIL OLG ID	15	0	0
Max Temp (oC)	27	27	21	20	26
Min Temp (oC)	11	15	15	13	11
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Clear sky
Max RH (%)	86	93	98	96	99
Min RH (%)	32	39	84	83	55
Wind Speed (KmpH)	4	5	6	2	3
*Wind Direction	5 E	E	N-E	E	N-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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm Char

Champhai- 0.00 mm

Mamit-0.00 mm

Aizawl-0.00 mm

Date of issue: 30th December, 2014

Serchhip-0.00mm

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Weather summary of the	past
three days	

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 20-27°C and 11-15°C. Maximum relative humidity is expected in the range of 86-99% and minimum may from 32-84%. Wind direction would be northeasterly with the wind speed of 2-6 km per hour. Dense cloudy will prevail during the next five days.

TT7 TT T	
Weekly cumulative rainfall: 15.0 n	m

Main Crop/ Animal	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
/Fisheries Khasi	Vegetative stage	Canker	Prune the diseased and dead twigs.
Mandarin	regenerate songe	LAWNGTLAN	<ul> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water</li> </ul>

1 | 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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	KOLASIB	single place.  ✓ Remove sword sucker and use it as new planting material.
	5	L. 5	✓ Provide irrigation to the base of the plant. ✓ Fertilizer application in split dose of
	}	£ 4	recommended dose.  ✓ Harvest fruits when the flower tips of the fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and loosen up the soil.
	{	AIZAVIL C	o Remove slips and use it as a new planting material.
	1		o Sucker dipping treatment with Bavistin @ 3g + Chloropyriphos @ 1 g/lt of water to
	10	7 7 7	protect against soil borne disease and insect.
		SERCHHI	<ul><li>Weeding and intercultural operation.</li><li>Provide irrigation to the plant.</li></ul>
Cucurbits	Vegetative stage	~~	Land is ploughed to a fine tilth and pits of 60 cm diameter and 30-45cm depth are made at a spacing of 2.0-2.5x 2.0-2.5 m, 2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUNGLEI	pumpkin, bottle gourd cucumber respectively. Well rotten FYM should be
	(	. ~	applied in pits and filled with top soil up to 3/4th height and 2-3 seeds will be sown in
	:- a	D.	each pit.
		75	In case of chow-chow, fruit are planted with broad end downwards, 2/3rd portion
		LAWNGTLAN	below soil at a spacing of 3.5 x 2.0 m.  Polythene nursery raising can be done/initiate
		Damping off and A Blight	✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g
		1 2 1	(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
Brinjal	Fruiting stage	3	<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
		KOLASIB	recommended dose.
			<ul> <li>Provide irrigation to the plant.</li> </ul>
	)	Disease:	<ul> <li>Seed treatment with captan, thiram or</li> </ul>
	5	Damping off-	chlorothalonil will effectively control this
		Care L	disease.
	1	Pest:	<ul> <li>Sulfur fungicides can be used to control</li> </ul>
	- E	Mites and hoppers-	this pest.
Cowpea	Fruiting stage		Trilling into bower structure.
	5	AIZAWL C	Weeding near the plant
		Cumming 1	♣ 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	Card formation stage	Application of Nitrogenous fertilizer urea
	) )		in card formation stage.
		SERCHHI	❖ Provide irrigation to the plant.
		Value of the second	Weeding near the plant.
	<b>\</b>	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
		LUNGLEI	✓ Prenching 1% Bordeaux mixture or 2 g
	3	manus et e e e e	captan or 3 copper oxychloride/ lt of water
		CV.	at 10-15 DAS are effective.
	<b>*</b>	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		3	in nursery is quite effective.
Mustard and	Flowering stage	( 5 A )	• Weeding in the toria plot.
toria			<ul> <li>Provide irrigation in the field.</li> </ul>
		1 2	• Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAND	✓ Weeding in the pea plot.
		SAIHA	✓ Provide irrigation in the field.
		<b>Aphid</b>	o In case of aphid infestation apply
		The state of	Imidachloprid 1.5ml/lt of water.
		A R	

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)



Tomato	Vegetative stage	Land preparation	<ul> <li>Weeding near the plant</li> </ul>
	8 8	1. /	• Fertilizer application in split dose of
		The state of the s	recommended dose.
	( )	/	<ul> <li>Provide irrigation to the plant.</li> </ul>
	) \	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	4		(Apron)/ kg seed
	)	(4/5)	✓ Drenching 1% Bordeaux mixture or 2 g
	5		captan or 3 copper oxychloride/ lt of water
	- 1	T. 0	at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
	Summer	blotch	water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly
	/ MAMIT	1	intervals.
	3	( AIZAVIL )	o Spraying of Blitox @ 3 g/l of water was
			found effective against leaf spot.
Rice	Harvesting stage		✓ Harvest rice crop
		1 585	✓ Cut residue 20 cm from the base.
	1		✓ Open the furrow with the help of furrow
	) )		opener.
		SERCHHI	✓ Place FYM and fertilizer.
		V	✓ Place the seed and cover by soil.
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
	Audit stage	Swine level.	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
	ran ago group	Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
			<ul> <li>Primary vaccination 6 month or above</li> </ul>
		1	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
		LAWNGTLAV	vaccine for adult birds.
	Early stage	Coccidiosis Coccidiosis	Amprolium or coccidiostat

4 | 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)



## **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	i	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	4	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

5 | 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)



District: Mamit Period: 31 December, 2014 - 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

	10,000 10,000	16	104		
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	MAIO COLD	10	0	0
Max Temp (oC)	26	25	23	23	27
Min Temp (oC)	12	15	15	14	13
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly clear
Max RH (%)	89	78	98	96	99
Min RH (%)	43	48	69	68	59
Wind Speed (KmpH)	4	4	4	2	2

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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm

\*Wind Direction

Champhai- 0.00 mm

Mamit-0.00 mm

Aizawl-0.00 mm

 $\mathbf{E}$ 

Date of issue: 30th December, 2014

Serchhip-0.00mm

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Weather	summary	of the	e past
	three day	S	

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 23-27°C and 12-15°C. Maximum relative humidity is expected in the range of 78-99% and minimum may from 48-69%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Dense cloudy will prevail during the next five days.

Weekly cumulative rainfall: 10.0 mm

		The state of the s		
Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal	
Animal	13	Pest/ Diseases	husbandry advisories	
/Fisheries	77			
Khasi	Vegetative stage	Canker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>	
Mandarin		LAWNGTLALS	<ul> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</li> </ul>	

1 | 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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	1	single place.  ✓ Remove sword sucker and use it as new
		KOLASIB	planting material.
	4		✓ Provide irrigation to the base of the plant.
	1	WY (	✓ Fertilizer application in split dose of
	>		recommended dose.  ✓ Harvest fruits when the flower tips of the
	1	3 2	fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and
	7 MAMIT	1	loosen up the soil.
	Š.	AIZAVVL C	<ul> <li>Remove slips and use it as a new planting material.</li> </ul>
	\	5	o Sucker dipping treatment with Bavistin @
	l l	3 8 6	3g + Chloropyriphos @ 1 g/lt of water to
	1	1 3 1	protect against soil borne disease and
	1 5		<ul><li>insect.</li><li>Weeding and intercultural operation.</li></ul>
		SERCHHI	
Cucurbits	Vegetative stage	V	Land is ploughed to a fine tilth and pits of
	5		60 cm diameter and 30-45cm depth are
	J.		made at a spacing of 2.0-2.5x 2.0-2.5 m, 2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUMPI EL	pumpkin, bottle gourd cucumber
	>	LUNGLEI	respectively. Well rotten FYM should be
	1	0	applied in pits and filled with top soil up to
		A C	3/4th height and 2-3 seeds will be sown in
		P \	each pit.  In case of chow-chow, fruit are planted
			with broad end downwards, 2/3rd portion
		7	below soil at a spacing of 3.5 x 2.0 m.
		1	Polythene nursery raising can be done
		Damping off and IA	initiate  ✓ Seed treatment with thiram 3g/kg seed or
		Blight	Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
		Jan 1999	at 10-15 DAS are effective.
Brinjal	Fruiting stage	1	<ul><li>Weeding near the plant</li></ul>
		( )	❖ Fertilizer application in split dose of
		KOLASIB	recommended dose.
			<ul> <li>Provide irrigation to the plant.</li> </ul>
	)	Disease:	<ul> <li>Seed treatment with captan, thiram or</li> </ul>
	5	Damping off-	chlorothalonil will effectively control this
		Care L	disease.
	1	Pest:	<ul> <li>Sulfur fungicides can be used to control</li> </ul>
	- E	Mites and hoppers-	this pest.
Cowpea	Fruiting stage	)	Trilling into bower structure.
	5	AIZAWL C	Weeding near the plant
		Comment 1	♣ 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	Card formation stage	Application of Nitrogenous fertilizer urea
	9.3		in card formation stage.
		SERCHHI	❖ Provide irrigation to the plant.
		V L	Weeding near the plant.
	(	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
		LUNGLEI	✓ Prenching 1% Bordeaux mixture or 2 g
	3	matteresent.	captan or 3 copper oxychloride/ lt of water
		Cv.	at 10-15 DAS are effective.
	-	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
			in nursery is quite effective.
Mustard and	Flowering stage	A TO	• Weeding in the toria plot.
toria			<ul> <li>Provide irrigation in the field.</li> </ul>
			• Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAN	✓ Weeding in the pea plot.
		/ SAIHA	✓ Provide irrigation in the field.
		<b>Aphid</b>	o In case of aphid infestation apply
		V see V	Imidachloprid 1.5ml/lt of water.
			1

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)



Tomato	Vegetative stage	Land preparation	❖ Weeding near the plant
			❖ Fertilizer application in split dose of
		file the same	recommended dose.
	( )	1	<ul> <li>Provide irrigation to the plant.</li> </ul>
	) \	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	1		(Apron)/ kg seed
	)	W. )	✓ Drenching 1% Bordeaux mixture or 2 g
	ς	2 1	captan or 3 copper oxychloride/ lt of water
	(f		at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
		blotch	water or Bavistin @ 1g/litre of water, 2-3
	7 MAMIT	A 2	sprayings should be given forthnightly
	5	AIZAWL C	intervals.
		111111111111111111111111111111111111111	o Spraying of Blitox @ 3 g/l of water was
			Touliu effective against leaf spot.
Rice	Harvesting stage	3 86	✓ Harvest rice crop
		1 3 15	✓ Cut residue 20 cm from the base.
			✓ Open the furrow with the help of furrow
	12	00000000	opener.
		SERCHHI	Place FYM and fertilizer.
D: a	All stores	Porcine	<ul><li>✓ Place the seed and cover by soil.</li><li>1. Culling of positive pigs or piglets.</li></ul>
Pig	All stages	Reproductive	1. Culling of positive pigs of pigiets.
		Respiratory	
		Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	Tiddit Stage	S WHICH IC COL	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
	age great	Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
		( ) ( )	❖ Primary vaccination 6 month or above
		1 2	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
J		LAWNGTLAL	vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat
		0000000	T

4 | 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)



## **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	4	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	Y	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

LAWNGTLAL

SAIHA

5 | 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)



District: Serchhip Period: 31 December, 2014 – 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

	10.5				
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	MAIL O. CID	12	0	0
Max Temp (oC)	26	27	21	19	26
Min Temp (oC)	10	14	14	11	10
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Clear sky
Max RH (%)	82	92	99	98	100
Min RH (%)	24	32	85	85	52
Wind Speed (KmpH)	5	5	4	2	2

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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm Champhai- 0.00 mm

Mamit-0.00 mm

Aizawl-0.00 mm

 $\mathbf{E}$ 

Date of issue: 30th December, 2014

Serchhip-0.00mm

\*Wind Direction

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Weather summary of t	the past
three days	

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 19-27°C and 10-12°C. Maximum relative humidity is expected in the range of 82-100% and minimum may from 24-85%. Wind direction would be easterly with the wind speed of 2-5 km per hour. Dense cloudy will prevail during the next five days.

Weekly cumulative rainfall: 12.0 mm

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural / animal husbandry advisories
Khasi Mandarin	Vegetative stage	Canker LAWNGTLAL SAIHA	<ul> <li>Prune the diseased and dead twigs.</li> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</li> </ul>

1 | 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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/ harvesting		✓ Remove water sucker, keep 1 or 2 plants in a single place.
	nai vesting	KOLASIB	✓ Remove sword sucker and use it as new planting material.
	-	LA C	✓ Provide irrigation in the base. ✓ Fertilizer application in split dose of
	5		recommended dose.  ✓ Harvest fruits when the flower tips of the
	1	3 2 /	fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and loosen up the soil.
	{	AIZAVIL	o Remove slips and use it as a new planting material.
	1	{	o Sucker dipping treatment with Bavistin @
	, l	3 66	3g + Chloropyriphos @ 1 g/lt of water to
	) ~	V 3 15	protect against soil borne disease and insect.
	) )		<ul><li>Weeding and intercultural operation.</li></ul>
		SERCHHI	
Cucurbits	Vegetative stage	V	Land is ploughed to a fine tilth and pits of
	4		60 cm diameter and 30-45cm depth are
		1/2	made at a spacing of 2.0-2.5x 2.0-2.5 m, 2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		DUMPLE ED	pumpkin, bottle gourd cucumber
	)	LUNGLEI	respectively. Well rotten FYM should be
	1		applied in pits and filled with top soil up to
	<u></u>	A 5 ~~	3/4th height and 2-3 seeds will be sown in
	1		each pit.
		901	In case of chow-chow, fruit are planted
		( () 4	with broad end downwards, 2/3rd portion
		f Y	below soil at a spacing of 3.5 x 2.0 m.  Polythene nursery raising can be done/
		LAWNGTLAL	initiate
		Damping off and  A	✓ Seed treatment with thiram 3g/kg seed or
		<b>Blig</b> ht	Trichoderma viride 4g+ metalaxyl 4g
		5	(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
D ' ' ' 1	E 41		at 10-15 DAS are effective.
Brinjal	Fruiting stage	J 8	<ul> <li>Weeding near the plant</li> <li>Fortilizer application in aplit does of</li> </ul>
		V	Fertilizer application in split dose of recommended dose.
		KOLASIB	
		Disease:	* Provide irrigation if require.
	1		<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this</li> </ul>
	γ	Damping off-	disease.
		Pest:	
			o Sulfur fungicides can be used to control
Correso	Emilia didelele	Mites and hoppers-	this pest.
Cowpea	Fruiting stage	\	Trilling into bower structure.  Weeding a conthe plant
	3	AIZAVIL (C	Weeding near the plant
			Draining of excess water and preparation mound near the base.
		Cook and loof blight	
	4	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Card formation stage	❖ Application of Nitrogenous fertilizer urea
_			in card formation stage.
		SERCHHI	❖ Provide irrigation if require.
		V	❖ Weeding near the plant.
	L.	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
	1	LUNGLEI	✓ Drenching 1% Bordeaux mixture or 2 g
	/	THE VALUE OF THE PARTY OF THE P	captan or 3 copper oxychloride/ lt of water
		Co.	at 10-15 DAS are effective.
	<b>A</b>	Mustard sawfly	Application of carbofuran 3G @ 100g/m <sup>2</sup>
			in nursery is quite effective.
Mustard and	Flowering stage	9 0	• Weeding in the toria plot.
toria			o Provide irrigation in the field.
		1 2	• Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAN	✓ Weeding in the pea plot.
		/ SAIHA	✓ Provide irrigation in the field.
		<b>Aphid</b>	o In case of aphid infestation apply
		f	Imidachloprid 1.5ml/lt of water.
		CALL TO ST	

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)



Tomato	Vegetative stage	Land preparation	<ul> <li>Weeding near the plant</li> </ul>
	8 8	1. /	• Fertilizer application in split dose of
		The state of the s	recommended dose.
	( )	/	<ul> <li>Provide irrigation in the plant.</li> </ul>
	) \	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	4		(Apron)/ kg seed
	)	(A/S)	✓ Drenching 1% Bordeaux mixture or 2 g
	5		captan or 3 copper oxychloride/ lt of water
	- 1	T. 0	at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
	Summer	blotch	water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly
	/ MAMIT	1	intervals.
	3	( AIZAVIL )	o Spraying of Blitox @ 3 g/l of water was
			found effective against leaf spot.
Rice	Harvesting stage		✓ Harvest rice crop
		1 585	✓ Cut residue 20 cm from the base.
	1		✓ Open the furrow with the help of furrow
	) )		opener.
		SERCHHI	✓ Place FYM and fertilizer.
		V	✓ Place the seed and cover by soil.
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
		Reproductive	1.0
		Respiratory Syndrome (PRRS).	
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	radit stage	Swine level.	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
		Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
			<ul> <li>Primary vaccination 6 month or above</li> </ul>
		1 21	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
		LAWNGTLAV	vaccine for adult birds.
	Early stage	<b>Coccidiosis</b>	Amprolium or coccidiostat

4 | 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)



# **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	4	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

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

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



District: Aizawl Period: 31 December, 2014 - 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

		E.	4		
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	WAIO CED	10	0	0
Max Temp (oC)	26	24	22	22	25
Min Temp (oC)	10	14	14	12	11
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly clear
Max RH (%)	86	- 78	99	97	99
Min RH (%)	36	43	71	66	57
Wind Speed (KmpH)	4	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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm

Serchhip-0.00mm

Main Cron/

Champhai- 0.00 mm

Lawngtalia-0.00mm

Mamit-0.00 mm

Lunglei-0.00mm

Aizawl-0.00 mm

Chhimtuipui-0.00mm

Date of issue: 30th December, 2014

Weather summary of the past three days Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 22-26<sup>o</sup>C and 10-14<sup>o</sup>C. Maximum relative humidity is expected in the range of 78-99% and minimum may from 36-71%. Wind direction would be easterly with the wind speed of 2-4 km per hour. Dense cloudy will prevail during the next five days.

Weekly cumulative rainfall: 10.0 mm

Animal /Fisheries	Stage	Pest/ Diseases	husbandry advisories
Khasi	Vegetative stage	Canker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>
Mandarin		LAWNGTLAL	<ul> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</li> </ul>

Cultural practices/

1 | P a g e

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

Stage



#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

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



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	1	single place.  ✓ Remove sword sucker and use it as new planting material.
	Į.	KOLASIB	✓ Provide irrigation to the base.
	)	Wy (	✓ Fertilizer application in split dose of recommended dose.
	}		✓ Harvest fruits when the flower tips of the
	1		fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and loosen up the soil.
	ξ	AIZAVIL	o Remove slips and use it as a new planting
	)	111000 11100	material.  Sucker dipping treatment with Povietin @
	\	3	<ul> <li>Sucker dipping treatment with Bavistin @</li> <li>3g + Chloropyriphos @ 1 g/lt of water to</li> </ul>
	1	1 5%	protect against soil borne disease and
	( )		insect.
	) )		<ul> <li>Weeding and intercultural operation.</li> </ul>
		SERCHHI	8 1
Cucurbits	Vegetative stage	V L	Land is ploughed to a fine tilth and pits of
	7		60 cm diameter and 30-45cm depth are made at a spacing of 2.0-2.5x 2.0-2.5 m,
	J.		2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUNGLEI	pumpkin, bottle gourd cucumber
	>	CONGLET	respectively. Well rotten FYM should be
	1	Č.	applied in pits and filled with top soil up to
	7	Δ (~	3/4th height and 2-3 seeds will be sown in
		2	each pit.
		701	In case of chow-chow, fruit are planted with broad end downwards, 2/3rd portion
		1 53 9	below soil at a spacing of 3.5 x 2.0 m.
			♣ Polythene nursery raising can be done/
		LAWNGTLAL	initiate
		Damping off and IA	✓ Seed treatment with thiram 3g/kg seed or
		Blight	Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed

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)



		1	✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water 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>Provide irrigation in the plant.</li> </ul>
	}	Disease: Damping off-	<ul> <li>Seed treatment with captan, thiram or chlorothalonil will effectively control this disease.</li> </ul>
	Į.	Pest: Mites and hoppers-	<ul> <li>Sulfur fungicides can be used to control this pest.</li> </ul>
Cowpea	Fruiting stage	AIZAWL	<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>
	- A	Scab and leaf blight disease	✓ Use of resistant varieties.
Early Cole crop	Vegetative stage	Card formation stage	<ul> <li>Application of Nitrogenous fertilizer urea in card formation stage.</li> <li>Provide irrigation to the plant.</li> <li>Weeding near the plant.</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.
	1	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m² in nursery is quite effective.
Mustard and toria	Flowering stage	M	<ul> <li>Weeding in the toria plot.</li> <li>Provide irrigation in the field.</li> <li>Top dressing with urea if available or apply cow dung.</li> </ul>
Pea	Flowering Stage	LAWNGTLAN	<ul><li>✓ Weeding in the pea plot.</li><li>✓ Provide irrigation in the field.</li></ul>
		Aphid	o In case of aphid infestation apply Imidachloprid 1.5ml/lt of water.

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)



Tomato	Vegetative stage	Land preparation	❖ Weeding near the plant
	8	1. /	• Fertilizer application in split dose of
		The state of the s	recommended dose.
	( )	/	<ul> <li>Provide irrigation to the plant.</li> </ul>
	) \-\	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	4		(Apron)/ kg seed
	)	(4/5)	✓ Drenching 1% Bordeaux mixture or 2 g
	5		captan or 3 copper oxychloride/ lt of water
		T. 0	at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
	Summer	blotch	water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly
	/ MAMIT	1	intervals.
	3	( AIZAVIL )	o Spraying of Blitox @ 3 g/l of water was
			found effective against leaf spot.
Rice	Harvesting stage		✓ Harvest rice crop
		1 585	✓ Cut residue 20 cm from the base.
	1 6		✓ Open the furrow with the help of furrow
	) )		opener.
		SERCHHI	✓ Place FYM and fertilizer.
		V	✓ Place the seed and cover by soil.
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
		Reproductive	
		Respiratory Syndrome (PRRS).	7
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	Addit stage	Swine level.	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
		Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
			<ul> <li>Primary vaccination 6 month or above</li> </ul>
			* Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
		LAWNGTLAV	vaccine for adult birds.
	Early stage	<b>Coccidiosis</b>	Amprolium or coccidiostat

4 | 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)



## **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	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	\$ 1	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:**

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

5 | 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)



District: Champhai Period: 31 December, 2014 - 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

	10.50	168	66.0		
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015
Rainfall (mm)	0	MAIL O. CITI	11	0	0
Max Temp (oC)	25	25 24 20		20	25
Min Temp (oC)	9	12	13	11	10
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly clear
Max RH (%)	87	- 86	98	97	99
Min RH (%)	32	39	77	68	54
Wind Speed (KmpH)	4	3	4	2	2
*Wind Direction	S	S-E	S-E	S-E	S-E

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

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

Kolasib- 0.00 mm

Champhai- 0.00 mm

Mamit-0.00 mm

Aizawl-0.00 mm

Date of issue: 30th December, 2014

Serchhip-0.00mm

Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Weather	<b>summary</b>	of the	past
	three day	S	-

# Weather-forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 20-25°C and 9-13°C. Maximum relative humidity is expected in the range of 86-99% and minimum may from 32-77%. Wind direction would be southeasterly with the wind speed of 2-4 km per hour. Partially cloudy will prevail during the next five days.

Weekly cumulative rainfall: 11.0 mm

Main Crop/ Animal /Fisheries	Stage	Cultural practices/ Pest/ Diseases	Agricultural / Horticultural/ animal husbandry advisories
Khasi Mandarin	Vegetative stage	Canker LAWNGTLAL SAIHA	<ul> <li>Prune the diseased and dead twigs.</li> <li>Wound dressing with Bordeaux paste and mulch with dry grass to conserve moisture and suppress the growth of weed.</li> <li>For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.</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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	1	single place.
	1 1		✓ Remove sword sucker and use it as new
		KOLASIB	planting material.
	4		✓ Provide irrigation in the base.
	1	(A)	✓ Fertilizer application in split dose of
	5		recommended dose.
	7	5	✓ Harvest fruits when the flower tips of the
			fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and
	/ MAMIT	4	loosen up the soil.
	3	( AIZAVIL )	o Remove slips and use it as a new planting material.
	(		o Sucker dipping treatment with Bavistin @
	(	- 5	3g + Chloropyriphos @ 1 g/lt of water to
	1	1 1/2	protect against soil borne disease and
	) 6		insect.
	( (		<ul> <li>Weeding and intercultural operation.</li> </ul>
		SERCHHI	Po Provide irrigation to the plant.
Cucurbits	Vegetative stage	V	Land is ploughed to a fine tilth and pits of
	<b>L</b>		60 cm diameter and 30-45cm depth are
			made at a spacing of 2.0-2.5x 2.0-2.5 m,
			2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUNGLEI	pumpkin, bottle gourd cucumber
			respectively. Well rotten FYM should be
	V	55	applied in pits and filled with top soil up to
		A	3/4th height and 2-3 seeds will be sown in
		2 \	each pit.  In case of chow-chow, fruit are planted
			with broad end downwards, 2/3rd portion
		) 53 9	below soil at a spacing of 3.5 x 2.0 m.
		1	♣ Polythene nursery raising can be done/
		LAWNGTLAL	initiate
		Damping off and	✓ Seed treatment with thiram 3g/kg seed or
		<b>Blight</b>	Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
Brinjal	Fruiting stage	1 3	❖ Weeding near the plant
			❖ Fertilizer application in split dose of
	3.5	KOLASIB	recommended dose.
			❖ Provide irrigation in the field.
	1	Disease:	o Seed treatment with captan, thiram or
	5	<b>Damping off-</b>	chlorothalonil will effectively control this
		3500 L	disease.
		Pest:	o Sulfur fungicides can be used to control
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage	1	Trilling into bower structure.
	5	AIZAVIL C	Weeding near the plant
		A comment	♣ 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	Card formation stage	Application of Nitrogenous fertilizer urea
	2.2		in card formation stage.
		SERCHHI	Provide irrigation in the plant.
		Vi Lag	Weeding near the plant.
		Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
		LUNGLEI	✓ Drenching 1% Bordeaux mixture or 2 g
	3	and the second	captan or 3 copper oxychloride/ lt of water
	7 7	60	at 10-15 DAS are effective.
	7	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
	1		in nursery is quite effective.
Mustard and	Flowering stage	1900	Weeding in the toria plot.
toria			o Provide irrigation in the field.
		77	o Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAV	✓ Weeding in the pea plot.
		F SAIHA	✓ Provide irrigation in the field.
		<b>Aph</b> id	o In case of aphid infestation apply
		L Carlot	Imidachloprid 1.5ml/lt of water.
		and Mount of	

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)



Tomato	Vegetative stage	Land preparation	❖ Weeding near the plant
			❖ Fertilizer application in split dose of
		A CONTRACTOR	recommended dose.
	7.7	/a 3	<ul><li>Provide irrigation in the plant.</li></ul>
	1 1 1	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	- t		(Apron)/ kg seed
	)	(AA)	✓ Drenching 1% Bordeaux mixture or 2 g
	5	2 1	captan or 3 copper oxychloride/ lt of water
	<i>y</i>		at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
		blotch	water or Bavistin @ 1g/litre of water, 2-3
	7 MAMIT	1	sprayings should be given forthnightly
	5	AIZAWL C	intervals.
		N. Committee	o Spraying of Blitox @ 3 g/l of water was
		1	Toutiu effective against leaf spot.
Rice	Harvesting stage	3 8 6	✓ Harvest rice crop
	\ \	1 3 1	✓ Cut residue 20 cm from the base.
	A (		✓ Open the furrow with the help of furrow
	1/	ocnoun	opener. ✓ Place FYM and fertilizer.
		SEKCHHI	✓ Place the seed and cover by soil.
Pig	All stages	Porcine	Culling of positive pigs or piglets.
I ig	All stages	Reproductive	1. Culling of positive pigs of piglets.
		Respiratory	1
		Syndrome (PRRS).	\$
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	Tarana Sungi	211222	months and yearly interval/6 month interval
Cattle	All age group	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
		Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
			❖ Primary vaccination 6 month or above
		-1	Revaccination annually
Poultry	Adult stage	Ranikhet Disease.	• F1 vaccine at (1-6) days of birth and R <sub>2</sub> B
,	2. 2. 7. 2. 2. 3	LAWNGTLAL	vaccine for adult birds.
	Early stage	Coccidiosis	Amprolium or coccidiostat

4 | 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)



## **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	4	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

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

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



District: Chhimtuipui Period: 31 December, 2014 – 4 January, 2015

Bulletin No: -479/2014/ Bulletin/English

			1			
Parameters	31.12.2014	01.01.2015	02.01.2015	03.01.2015	04.01.2015	
Rainfall (mm)	0	WAIL OF CALD	9	0	0	
Max Temp (oC)	27	27	20	23	27	
Min Temp (oC)	10	15 15		12	12	
Cloud Coverage	Mainly cloudy	Mainly cloudy	Mainly cloudy	Mainly cloudy	Clear sky	
Max RH (%)	94	96	95	98	100	
Min RH (%)	26	38	86	53	45	
Wind Speed (KmpH)	4	6	6	4	4	
*Wind Direction	E	E	E	E	N-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- November 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 0.00 mm Champhai- 0.00 mm Mamit-0.00 mm Aizawl-0.00 mm

Serchhip-0.00mm Lawngtalia-0.00mm

Lunglei-0.00mm

Chhimtuipui-0.00mm

Date of issue: 30th December, 2014

Weather summary of the p	Jasi
three days	

# Weather forecast valid from 31<sup>st</sup> December, 2014 To 4<sup>th</sup> January, 2015.

There is a chance of light rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 20-27°C and 10-15°C. Maximum relative humidity is expected in the range of 94-100% and minimum may from 26-86%. Wind direction would be Northeasterly with the wind speed of 4-6 km per hour. Dense cloudy will prevail during the next five days.

	<b>T</b> 7		•		cumul		• (	•	11	$\Lambda \Lambda$	Λ	
· V	v	00	וע	17	cumul	ativo	raint	$\boldsymbol{n}$	"	пч		mm
	7	661	v	, V	cumu	uiive	<i>i</i> uiii	u	••	v	·v	

Main Crop/	Stage	Cultural practices/	Agricultural / Horticultural/ animal
Animal		Pest/ Diseases	husbandry advisories
/Fisheries	8	1 5 3	
Khasi	Vegetative stage	Canker	<ul> <li>Prune the diseased and dead twigs.</li> </ul>
Mandarin		LAWNGTLAL	Wound dressing with Bordeaux paste and
		SAIHA	mulch with dry grass to conserve moisture
		( SAITIA	and suppress the growth of weed.
			• For canker, spray streoptomycin 2g +
		1 2 1	copperoxycholoride 8 g /10 lt of water.

1 | 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)



			• Excess water removes from the base of the plant.
Banana	Vegetative/		✓ Remove water sucker, keep 1 or 2 plants in a
	harvesting	1	single place.
	1 1		✓ Remove sword sucker and use it as new
		KOLASIB	planting material.
	4		✓ Provide irrigation to the base of the plant.
	1	(A)	✓ Fertilizer application in split dose of
	5		recommended dose.
	7	5	✓ Harvest fruits when the flower tips of the
			fruit dehiscent.
Pineapple	Vegetative stage		o Clean the vicinity of plants by weeding and
	/ MAMIT	4	loosen up the soil.
	3	( AIZAVIL )	o Remove slips and use it as a new planting material.
		1	<ul><li>Sucker dipping treatment with Bavistin @</li></ul>
		3	3g + Chloropyriphos @ 1 g/lt of water to
	4	121	protect against soil borne disease and
	) 6		insect.
	) )		<ul> <li>Weeding and intercultural operation.</li> </ul>
		SERCHHI	
Cucurbits	Vegetative stage	V	Land is ploughed to a fine tilth and pits of
	(		60 cm diameter and 30-45cm depth are
			made at a spacing of 2.0-2.5x 2.0-2.5 m,
			2.0-2.5x 1.0-2.0 1.5-2.0 x 1.0-2.0 m for
		LUNGLEI	pumpkin, bottle gourd cucumber
	3		respectively. Well rotten FYM should be
	V	500	applied in pits and filled with top soil up to
		A	3/4th height and 2-3 seeds will be sown in
	11		each pit.  In case of chow-chow, fruit are planted
		7 ( (	with broad end downwards, 2/3rd portion
		1 53 4	below soil at a spacing of 3.5 x 2.0 m.
		1	Polythene nursery raising can be done/
		LAWNGTLAN	initiate
		Damping off and  A	
		<b>Blight</b>	Trichoderma viride 4g+ metalaxyl 4g
		1	(Apron)/ kg seed

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)



			✓ Drenching 1% Bordeaux mixture or 2 g
			captan or 3 copper oxychloride/ lt of water
			at 10-15 DAS are effective.
Brinjal	Fruiting stage	3	<ul> <li>Weeding near the plant</li> </ul>
			❖ Fertilizer application in split dose of
		KOLASIB	recommended dose.
			<ul> <li>Provide irrigation to the plant.</li> </ul>
	)	Disease:	<ul> <li>Seed treatment with captan, thiram or</li> </ul>
	\$	Damping off-	chlorothalonil will effectively control this
	1		disease.
	1	Pest:	<ul> <li>Sulfur fungicides can be used to control</li> </ul>
		Mites and hoppers-	this pest.
Cowpea	Fruiting stage	( ).	Trilling into bower structure.
	5	AIZAVVL C	Weeding near the plant
		C MICHAEL TO	♣ 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	Card formation stage	Application of Nitrogenous fertilizer urea
		-	in card formation stage.
		SERCHHI	❖ Provide irrigation to the plant.
		V	Weeding near the plant.
	<u></u>	Damping off	✓ Seed treatment with thiram 3g/kg seed or
			Trichoderma viride 4g+ metalaxyl 4g
			(Apron)/ kg seed
	1	LUNGLEI	✓ Drenching 1% Bordeaux mixture or 2 g
	>	HALL STEEL	captan or 3 copper oxychloride/ lt of water
	1	esc.	at 10-15 DAS are effective.
	-	Mustard sawfly	✓ Application of carbofuran 3G @ 100g/m²
		3	in nursery is quite effective.
Mustard and	Flowering stage	9 8	Weeding in the toria plot.
toria	5 5		o Provide irrigation to the field.
		1 2	Top dressing with urea if available or apply
			cow dung.
Pea	Flowering Stage	LAWNGTLAN	✓ Weeding to the pea plot.
	5 5	J SAIHA	✓ Provide irrigation in the field.
		Aphid	o In case of aphid infestation apply
		1	Imidachloprid 1.5ml/lt of water.
		EL C	• • • • • • • • • • • • • • • • • • •

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)



Tomato	Vegetative stage	Land preparation	<ul> <li>Weeding near the plant</li> </ul>
			* Fertilizer application in split dose of
		The state of	recommended dose.
	- 7	/ 3	<ul><li>Provide irrigation in the plant.</li></ul>
	1 1	Damping off	✓ Seed treatment with thiram 3g/kg seed or
		KOLASIB	Trichoderma viride 4g+ metalaxyl 4g
	1		(Apron)/ kg seed
	)	WS )	✓ Drenching 1% Bordeaux mixture or 2 g
	5		captan or 3 copper oxychloride/ lt of water
	1		at 10-15 DAS are effective.
		Leaf spot and leaf	o Spraying Dithane M-45 @ 2.5g/litre of
	K	blotch	water or Bavistin @ 1g/litre of water, 2-3
	7 MAMIT	1	sprayings should be given forthnightly
	8	¿ AIZAVIL 10	intervals.
			<ul> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>
Rice	Harvesting stage		✓ Harvest rice crop
Nice	Hai vesting stage	1 1	✓ Cut residue 20 cm from the base.
	) &		✓ Open the furrow with the help of furrow
	) )		opener.
		_ SERCHHI	-
	Y	V~~	✓ Place the seed and cover by soil.
Pig	All stages	Porcine	1. Culling of positive pigs or piglets.
		Reproductive	14
		Respiratory	7
		Syndrome (PRRS).	4
	Adult stage	Swine fever.	2. Vaccination of pigs with SF vaccines at 2
	2 7		months and yearly interval/6 month interval
Cattle	All age group 🦎	Foot and Mouth	• FMD vaccine at 16 week and repeat every 6
	1	Disease (FMD)	month.
	Young stage	Black Quarter (BQ)	Black Quarter Vaccine (BQV).
	3	1 63 4	♦ Primary vaccination 6 month or above
	A 3 34 :	- · · · · ·	* 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 Coccidiosis	Amprolium or coccidiostat

4 | 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)



## **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:**

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

5 | P a g e

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