

### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{\text{th}}$  Dec. **No** rainfall was recorded during past four days. Maximum temperature range observed was 22.5-24.2 °C, range of minimum temperature observed was 3.1-6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2-1.6 km/hr.

## Weather forecast for next five days of Imphal-East (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $20.0-22.0~^{\circ}\text{C}$  & minimum temp.  $4.0-6.0~^{\circ}\text{C}$ . Relative humidity may reach upto 100~% (maximum RH) & 62~% (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		,	
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
			Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the
Pulses	Vegetative		<ul><li>infected patches only.</li><li>If facility is available give irrigation to keep soil moist during</li></ul>
(Field pea/	vegetative		vegetative stage for better yield.
Lentil)		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of
,		1-4	water against aphid on the infected patches only.
			- For organic control against aphid, sprays that consist of
			Azadirachtin, Neem oil or Pyrethrin may be used.
Rabi maize	Sowing to		- Rabi maize may be sown as intercrop with potato or pulses. Ridges
	vegetative		along east-west direction may be prepared after ploughing. Southern
			face may be sown with maize and northern with pea seeds.
C1			- Give light irrigation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth.
			After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			Their proper drying, store grams, seeds in wen ventilated godowns.
			After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg
			MOP along with 40 kg FYM should be incorporated with the soil in an
Cauliflower,	Transplanting		area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd
Cabbage & Broccoli			formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid
			varieties of cabbage (like Rareball, Green Hero) and cauliflower (White
	** 4.0		Flash, Sweetha).
	Head formation	Plutella, Daimond,	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7
	stage to harvesting	Black Moth Leaf eating caterpillar	days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
	to harvesting	Lear earing caterpinar	
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Cauliflower	Curd formation	Whip tail and	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/
	stage	Chlorosis	curl towards the terminal end or chlorosis (whitening/ yellowing of
			leaves) is observed.



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Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,
Cucui bits	Sowing		pumpkin, etc. in poly-pouch and trays may be done under polyhouse.
			- Maintain seedlings upto 4-5 leaves stage under the polyhouse.
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of
			nursery.
		Leaf eating	- Spray Confidor @ 0.5 ml/ lit of water.
		caterpillar, thrips & mite.	
Ginger	Harvesting		- Avoid bruise/ wound to the rhizome while harvesting.
			- Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.
			- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap
			with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.
Animal Sci	iences		J
Name of the an		Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
·	groups (as and who required)	Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
			<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	age (as and when	f Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
	required)	F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of	f Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffa		f Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisor	ies
Carp/	Harvesting and stock	- Fish harvesting can b	be done.
Catfish	maintenance	_	ear and for this practices mentioned below may be done in small scale.
culture		- Ponds should be free	from unwanted vegetation and insects and water depth should be
		maintained at 1.0 - 1.5	
			rided 1-2 times a day @ 2-3 % body weight per day.
			ortified with vitamins and minerals should be provided.
		- Apply Green AQ @	4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.



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### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{\text{th}}$  Dec. **No** rainfall was recorded during past four days. Maximum temperature range observed was 22.5-24.2 °C, range of minimum temperature observed was 3.1-6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2-1.6 km/hr.

# Weather forecast for next five days of Imphal-West (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to mainly cloudy with maximum temp. of  $22.0-23.0~^{\circ}\text{C}$  & minimum temp.  $3.0-5.0~^{\circ}\text{C}$ . Relative humidity may reach upto 99 % (maximum RH) & 59 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	,	J.	
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
			Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the
7.1	**		infected patches only.
Pulses	Vegetative		- If facility is available give irrigation to keep soil moist during
(Field pea/ Lentil)		Ambid	vegetative stage for better yield.
Lentii)		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.
			- For organic control against aphid, sprays that consist of
			Azadirachtin, Neem oil or Pyrethrin may be used.
Rabi maize	Sowing to		- Rabi maize may be sown as intercrop with potato or pulses. Ridges
	vegetative		along east-west direction may be prepared after ploughing. Southern
			face may be sown with maize and northern with pea seeds.
			- Give light irrigation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of
			seeds and charcoal. Check for germination of seeds or fungal growth.
Handinaldana Cara			After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg
			MOP along with 40 kg FYM should be incorporated with the soil in an
Cauliflower,	Transplanting		area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd
Cabbage & Broccoli	Transpranting		formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid
			varieties of cabbage (like Rareball, Green Hero) and cauliflower (White
			Flash, Sweetha).
	Head formation	Plutella, Daimond,	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7
	stage	Black Moth	days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for
Carliffarrer	C -1 C	XX/1.'	good yield.
Cauliflower	Curd formation	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of
	stage	CHIOLOSIS	leaves) is observed.
			10000011000.



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Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,	
			pumpkin, etc. in poly-pouch and trays may be done under polyhouse.  - Maintain seedlings upto 4-5 leaves stage under the polyhouse.	
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of	
			nursery.	
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.	
Ginger Harvesting			<ul> <li>Avoid bruise/ wound to the rhizome while harvesting.</li> <li>Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.</li> <li>There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.</li> </ul>	
Animal Sci	ences		and seeds.	
Name of the ani		Disease/ infestation	Agro-meteorological advisories	
Poultry	All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.	
	groups (as and when required)	Management	<ul> <li>Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.</li> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> </ul>	
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.	
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.	
Sheep/ Goat	age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
	required)	F.M.D.	- Vaccinate against F.M.D.	
		Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buffal		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.	
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:				
Type of Farming	Stage & Management	Agro-metrological advisor	ies	
Carp/	Harvesting and stock	- Fish harvesting can b	pe done.	
Catfish culture	maintenance	<ul><li>Stock fish for next year and for this practices mentioned below may be done in small scale.</li><li>Ponds should be free from unwanted vegetation and insects and water depth should be</li></ul>		
		maintained at 1.0 - 1.5	m. vided 1-2 times a day @ 2-3 % body weight per day.	
			ortified with vitamins and minerals should be provided.	



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#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{th}$  Dec. No rainfall was recorded during past four days. Maximum temperature range observed was  $22.5-24.2\ ^{\circ}\text{C}$ , range of minimum temperature observed was  $3.1-6.1\ ^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was  $1.2-1.6\ \text{km/hr}$ .

## Weather forecast for next five days of Senapati (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $17.0-21.0~^{\circ}\text{C}$  & minimum temp.  $2.0-5.0~^{\circ}\text{C}$ . Relative humidity may reach upto 100~% (maximum RH) & 58~% (minimum RH). The average wind speed may be 2-3~km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	1	<u>'</u>	
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/	Vegetative		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
Lentil)		Aphid	<ul> <li>Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.</li> <li>For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.</li> </ul>
Rabi maize	Sowing to vegetative		<ul> <li>Rabi maize may be sown as intercrop with potato or pulses. Ridges along east-west direction may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.</li> <li>Give light irrigation.</li> </ul>
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth.  After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Head formation stage	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
Ginger	Harvesting		- Avoid bruise/ wound to the rhizome while harvesting Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.



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## "Integrated Agromet Advisory Services"

				- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.		
Animal Sc						
Name of the an	imal Growth s	tage	Disease/ infestation	Agro-meteorological advisories		
Poultry		ptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.		
		groups (as and when required)	Management	<ul> <li>- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.</li> <li>- Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>		
				As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.		
Sheep/ Goat	age (as ar	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.		
	required)		F.M.D.	- Vaccinate against F.M.D.		
			Deworming	- Give Albomac suspension @ 5ml per adult.		
Pig		Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.		
			Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.		
	required)		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.		
Cattle / Buffa		months of	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.		
Mithun	age (as ar required)		F.M.D.	- Vaccinate against F.M.D.		
	required)		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.		
Fishery:						
Type of Farming	Stage & Management		Agro-metrological advisor	ries		
Carp/				- Fish harvesting can be done.		
Catfish culture	maintenance		<ul> <li>Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> </ul>			
			- Well balanced feed f	wided 1-2 times a day @ 2-3 % body weight per day.  Fortified with vitamins and minerals should be provided.  4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.		

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### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### **Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

#### Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of 27<sup>th</sup> Dec. **No** rainfall was recorded during past four days. Maximum temperature range observed was 22.5 – 24.2 °C, range of minimum temperature observed was 3.1 – 6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2 - 1.6 km/hr.

#### Weather forecast for next five days of Tamenglong (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of 20.0 - 23.0 °C & minimum temp. 6.0 - 8.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 56 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Fog would occur at most places over Manipur during next 2 days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	1		
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/	Vegetative		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
Lentil)		Aphid	<ul> <li>Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.</li> <li>For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.</li> </ul>
Rabi maize	Sowing to vegetative		<ul> <li>Rabi maize may be sown as intercrop with potato or pulses. Ridges along east-west direction may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.</li> <li>Give light irrigation.</li> </ul>
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweetha).
	Head formation stage	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.



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Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,	
			pumpkin, etc. in poly-pouch and trays may be done under polyhouse.  - Maintain seedlings upto 4-5 leaves stage under the polyhouse.	
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of	
			nursery.	
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.	
Ginger Harvesting			<ul> <li>- Avoid bruise/ wound to the rhizome while harvesting.</li> <li>- Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.</li> <li>- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.</li> </ul>	
Animal Sci	ences		J	
Name of the ani		Disease/ infestation	Agro-meteorological advisories	
Poultry	All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.	
·	groups (as and wher required)	Management	<ul> <li>Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.</li> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> </ul>	
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B & vitamin C.	
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.	
Sheep/ Goat	age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
	required)	F.M.D.	- Vaccinate against F.M.D.	
		Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buffal		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.	
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:				
Type of Farming	Stage & Management	Agro-metrological advisor	ies	
Carp/	Harvesting and stock	- Fish harvesting can b	e done.	
Catfish culture	maintenance	<ul><li>Stock fish for next year and for this practices mentioned below may be done in small scale.</li><li>Ponds should be free from unwanted vegetation and insects and water depth should be</li></ul>		
		maintained at 1.0 - 1.5	m. rided 1-2 times a day @ 2-3 % body weight per day.	
			ortified with vitamins and minerals should be provided.	



### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### **Thoubal**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{\rm th}$  Dec. No rainfall was recorded during past four days. Maximum temperature range observed was 22.5-24.2 °C, range of minimum temperature observed was 3.1-6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2-1.6 km/hr.

## Weather forecast for next five days of Thoubal (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $19.0-22.0~^{\circ}\text{C}$  & minimum temp.  $4.0-8.0~^{\circ}\text{C}$ . Relative humidity may reach upto 100~% (maximum RH) & 61 % (minimum RH). The average wind speed may be 2~km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		,	
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
			Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses	Vegetative		- If facility is available give irrigation to keep soil moist during
(Field pea/	Vegetative		vegetative stage for better yield.
Lentil)		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of
,		1-4	water against aphid on the infected patches only.
			- For organic control against aphid, sprays that consist of
			Azadirachtin, Neem oil or Pyrethrin may be used.
Rabi maize	Sowing to		- Rabi maize may be sown as intercrop with potato or pulses. Ridges
	vegetative		along east-west direction may be prepared after ploughing. Southern
			face may be sown with maize and northern with pea seeds.
C1			- Give light irrigation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth.
			After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			Their proper drying, store grains, seeds in wen ventilated godowns.
			After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg
			MOP along with 40 kg FYM should be incorporated with the soil in an
California,	Transplanting		area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd
Cabbage & Broccoli			formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid
			varieties of cabbage (like Rareball, Green Hero) and cauliflower (White
	XX 1.0	D1 - 11 D ' 1	Flash, Sweetha).
	Head formation	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	stage to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
	to har vosting	Zon caring carerpinar	Regular weeding, inter-culture & watering at this stage is advised for
			good yield.
Cauliflower	Curd formation	Whip tail and	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/
	stage	Chlorosis	curl towards the terminal end or chlorosis (whitening/ yellowing of
			leaves) is observed.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,		
Cucuibits	bowing		pumpkin, etc. in poly-pouch and trays may be done under polyhouse.		
			- Maintain seedlings upto 4-5 leaves stage under the polyhouse.		
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of		
			nursery.		
		Leaf eating	- Spray Confidor @ 0.5 ml/ lit of water.		
		caterpillar, thrips & mite.			
Ginger	Harvesting		- Avoid bruise/ wound to the rhizome while harvesting.		
			- Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.		
			- There are chances of mouldy and fungal growth in this weather. Hence,		
			treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap		
			with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.		
Animal Sci					
Name of the an	oro with stage	Disease/ infestation	Agro-meteorological advisories		
Poultry	All susceptible age		Give Coximar @ 2g/lit of drinking water for 5-7 days.		
	groups (as and whe required)	n Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.		
			- Increase energy feed upto 5% (like maize, rice bran, etc.).		
			- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7		
			days along with vitamin A, vitamin B & vitamin C.  As the temperature is becoming low during night time protect birds from		
			cold by using polythene sheet or hessian cloth.		
Sheep/ Goat	age (as and when		Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.		
	required)	F.M.D.	- Vaccinate against F.M.D.		
		Deworming	- Give Albomac suspension @ 5ml per adult.		
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.		
	age (as and when required)	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.		
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.		
Cattle / Buffa		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.		
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.		
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.		
Fishery:					
Type of Farming	Stage & Management	Agro-metrological advisor	nes		
Carp/	Harvesting and stock	- Fish harvesting can be done.			
Catfish	maintenance	- Stock fish for next year and for this practices mentioned below may be done in small scale.			
culture			- Ponds should be free from unwanted vegetation and insects and water depth should be		
		maintained at 1.0 - 1.5			
			rided 1-2 times a day @ 2-3 % body weight per day.  ortified with vitamins and minerals should be provided.		
			4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.		
	1	Tippi, Sicon rig @			



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#### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{\rm th}$  Dec. No rainfall was recorded during past four days. Maximum temperature range observed was 22.5-24.2 °C, range of minimum temperature observed was 3.1-6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2-1.6 km/hr.

## Weather forecast for next five days of Ukhrul (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $17.0-21.0~^{\circ}\text{C}$  & minimum temp.  $2.0-5.0~^{\circ}\text{C}$ . Relative humidity may reach upto 94 % (maximum RH) & 50 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		<del>,</del>	
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/	Vegetative		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
Lentil)		Aphid	<ul> <li>- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.</li> <li>- For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.</li> </ul>
Rabi maize	Sowing to vegetative		- Rabi maize may be sown as intercrop with potato or pulses. Ridges along east-west direction may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.  - Give light irrigation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Head formation stage	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
Ginger	Harvesting		<ul> <li>Avoid bruise/ wound to the rhizome while harvesting.</li> <li>Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.</li> </ul>



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## "Integrated Agromet Advisory Services"

				- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing	
				the seeds.	
Animal Sc					
Name of the a	ınimal	Growth stage	Disease/ infestation	Agro-meteorological advisories	
Poultry		All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.	
		groups (as and when required)	Management	<ul> <li>- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.</li> <li>- Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>- Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>	
				As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.	
Sheep/ Goa	at	Above 3 months of age (as and when required)	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
			F.M.D.	- Vaccinate against F.M.D.	
			Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig		Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
			Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
			Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buff	falo/	Above 3 months of	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun		age (as and when required)	F.M.D.	- Vaccinate against F.M.D.	
		required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:					
Type of Farming	Stage & Manage		Agro-metrological advisor	ries	
Carp/	Harvesting and stock maintenance - Fish harvesting can be done Stock fish for next year and for this practice.		- Fish harvesting can b	be done.	
Catfish			- Stock fish for next year and for this practices mentioned below may be done in small scale.		
culture				e from unwanted vegetation and insects and water depth should be	
			maintained at 1.0 - 1.5m.		
				vided 1-2 times a day @ 2-3 % body weight per day.	
				Fortified with vitamins and minerals should be provided.	
			- Apply Green AQ @	4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

(I. Meghachandra Singh) Scientist i/c, GKMS



### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{th}$  Dec. No rainfall was recorded during past four days. Maximum temperature range observed was  $22.5-24.2\ ^{\circ}\text{C}$ , range of minimum temperature observed was  $3.1-6.1\ ^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was  $1.2-1.6\ \text{km/hr}$ .

# Weather forecast for next five days of Bishnupur (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $20.0-23.0~^{\circ}\text{C}$  & minimum temp.  $5.0-8.0~^{\circ}\text{C}$ . Relative humidity may reach upto 99 % (maximum RH) & 59 % (minimum RH). The average wind speed may be 2 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	l.		
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/	Vegetative		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
Lentil)		Aphid	<ul> <li>- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.</li> <li>- For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.</li> </ul>
Rabi maize	Sowing to vegetative		<ul> <li>Rabi maize may be sown as intercrop with potato or pulses. Ridges along east-west direction may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.</li> <li>Give light irrigation.</li> </ul>
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			1 1 7 6, 6
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweetha).
	Head formation stage	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,
			pumpkin, etc. in poly-pouch and trays may be done under polyhouse.
			- Maintain seedlings upto 4-5 leaves stage under the polyhouse.
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
Ginger	Harvesting		<ul> <li>- Avoid bruise/ wound to the rhizome while harvesting.</li> <li>- Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.</li> <li>- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.</li> </ul>
Animal Sci			
Name of the an	Oro will stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
	groups (as and when required)	Management	<ul> <li>Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.</li> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.
Sheep/ Goat	age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
	required)	F.M.D.	- Vaccinate against F.M.D.
		Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffa		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisor	ies
	Harvesting and stock	- Fish harvesting can be done.	
Carp/ Catfish culture  Harvesting and stock maintenance		<ul> <li>Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>Feeds should be provided 1-2 times a day @ 2-3 % body weight per day.</li> </ul>	
		- Well balanced feed fortified with vitamins and minerals should be provided.	
			4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.



### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{th}$  Dec. No rainfall was recorded during past four days. Maximum temperature range observed was  $22.5-24.2\ ^{\circ}\text{C}$ , range of minimum temperature observed was  $3.1-6.1\ ^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was  $1.2-1.6\ \text{km/hr}$ .

## Weather forecast for next five days of Chandel (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $18.0-22.0~^{\circ}\text{C}$  & minimum temp.  $3.0-7.0~^{\circ}\text{C}$ . Relative humidity may reach upto 94 % (maximum RH) & 55 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
-	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/	Vegetative		- If facility is available give irrigation to keep soil moist during vegetative stage for better yield.
Lentil)		Aphid	<ul> <li>- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid on the infected patches only.</li> <li>- For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.</li> </ul>
Rabi maize	Sowing to vegetative		<ul> <li>Rabi maize may be sown as intercrop with potato or pulses. Ridges along east-west direction may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.</li> <li>Give light irrigation.</li> </ul>
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Cauliflower, Cabbage & Broccoli	Transplanting		After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg MOP along with 40 kg FYM should be incorporated with the soil in an area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid varieties of cabbage (like Rareball, Green Hero) and cauliflower (White Flash, Sweetha).
	Head formation stage	Plutella, Daimond, Black Moth	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Cauliflower	Curd formation stage	Whip tail and Chlorosis	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/ curl towards the terminal end or chlorosis (whitening/ yellowing of leaves) is observed.



### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd,	
Cucui bits	Downing		pumpkin, etc. in poly-pouch and trays may be done under polyhouse.	
			- Maintain seedlings upto 4-5 leaves stage under the polyhouse.	
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of	
			nursery.	
		Leaf eating	- Spray Confidor @ 0.5 ml/ lit of water.	
		caterpillar, thrips & mite.		
Ginger	Harvesting		- Avoid bruise/ wound to the rhizome while harvesting.	
			- Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.	
			- There are chances of mouldy and fungal growth in this weather. Hence, treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap	
			with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing	
1 . 10	•		the seeds.	
Animal Sci		Digagga/ :ftt:	A and matagonals sited a designation	
	imal Growth stage All susceptible age	Disease/ infestation	Agro-meteorological advisories	
Poultry	groups (as and whe		Give Coximar @ 2g/lit of drinking water for 5-7 days.	
	required)	<sup>n</sup> Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.	
			<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>	
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.	
Sheep/ Goat	age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
	required)	F.M.D.	- Vaccinate against F.M.D.	
		Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buffa		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (as and when	F.M.D.	- Vaccinate against F.M.D.	
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:	1			
Type of Farming	Stage & Management			
Carp/	Harvesting and stock	- Fish harvesting can b	be done.	
Catfish	maintenance	- Stock fish for next year and for this practices mentioned below may be done in small scale.		
culture		- Ponds should be free from unwanted vegetation and insects and water depth should be		
		maintained at 1.0 - 1.5m.		
		- Feeds should be provided 1-2 times a day @ 2-3 % body weight per day.		
		- Well balanced feed fortified with vitamins and minerals should be provided Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.		
		- Apply Green AQ @	4mre/ na or nme @ 200kg/ na. Maintain good quanty of pond water.	



### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



### "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 30<sup>th</sup> December, 2014

#### Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 31<sup>st</sup> December to 4<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (26<sup>th</sup> to 29<sup>th</sup> December, 2014)

During past four days sky was clear to mainly clear but mainly cloudy during afternoon hours of  $27^{\text{th}}$  Dec. **No** rainfall was recorded during past four days. Maximum temperature range observed was 22.5-24.2 °C, range of minimum temperature observed was 3.1-6.1 °C, mean relative humidity observed in morning and afternoon were 86.8 % and 49.5 % respectively. The average wind speed range was 1.2-1.6 km/hr.

# Weather forecast for next five days of Churachandpur (31st December to 4th January, 2014)

There may be light rain at isolated places on Thursday. Sky will be partly cloudy to cloudy with maximum temp. of  $19.0-23.0~^{\circ}\text{C}$  & minimum temp.  $4.0-7.0~^{\circ}\text{C}$ . Relative humidity may reach upto 99 % (maximum RH) & 60 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 2<sup>nd</sup> January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to		- Top dress with Urea @ 32.5 kg/ha at 30 days after sowing.
	flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
			Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the
Pulses	Vegetative		<ul><li>infected patches only.</li><li>If facility is available give irrigation to keep soil moist during</li></ul>
(Field pea/	vegetative		vegetative stage for better yield.
Lentil)		Aphid	- Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of
,		<b>F</b>	water against aphid on the infected patches only.
			- For organic control against aphid, sprays that consist of
			Azadirachtin, Neem oil or Pyrethrin may be used.
Rabi maize	Sowing to		- Rabi maize may be sown as intercrop with potato or pulses. Ridges
	vegetative		along east-west direction may be prepared after ploughing. Southern
			face may be sown with maize and northern with pea seeds.
C1			- Give light irrigation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for germination of seeds or fungal growth.
			After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			Titler proper drying, store grains, seeds in wen ventilated godowns.
110 memme erops			After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg
	Transplanting		MOP along with 40 kg FYM should be incorporated with the soil in an
Cauliflower,			area of 100 m <sup>2</sup> and another 850 g Urea may be top dressed at head/ curd
Cabbage & Broccoli			formation stage. Transplant at a spacing of 60 cm x 60 cm for hybrid
			varieties of cabbage (like Rareball, Green Hero) and cauliflower (White
	** 10	DI 11 D 1	Flash, Sweetha).
	Head formation	Plutella, Daimond,	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7
	stage to harvesting	Black Moth Leaf eating caterpillar	days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
	to har vesting	Lear eating caterpinar	
			Regular weeding, inter-culture & watering at this stage is advised for good yield.
Cauliflower	Curd formation	Whip tail and	- Spray Tracel @ 5g/ litre of water if leaves fail to develop normally/
	stage	Chlorosis	curl towards the terminal end or chlorosis (whitening/ yellowing of
			leaves) is observed.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004



Cucurbits	Sowing		- Raising of cucurbits like water-melon, cucumber, sponge gourd, pumpkin, etc. in poly-pouch and trays may be done under polyhouse.	
			- Maintain seedlings upto 4-5 leaves stage under the polyhouse.	
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of	
			nursery.	
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.	
Ginger	Harvesting		- Avoid bruise/ wound to the rhizome while harvesting.	
			<ul> <li>Sort out healthy rhizomes for seeds and apply neem based pesticides to protect from scale insects. Incorporate dried <i>Lantana camera</i> leaves with the rhizome seed wile storing.</li> <li>There are chances of mouldy and fungal growth in this weather. Hence,</li> </ul>	
			treat the seeds with <i>Trichoderma viride</i> @ 20g/ kg seed, cover the heap with gunny bags/ tarpaulin for 2-3 days in an airy shade before storing the seeds.	
Animal Sc	iences			
Name of the an	Oro will stage	Disease/ infestation	Agro-meteorological advisories	
Poultry	All susceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.	
	groups (as and when required)	Management Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.	
			<ul> <li>Increase energy feed upto 5% (like maize, rice bran, etc.).</li> <li>Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin A, vitamin B &amp; vitamin C.</li> </ul>	
			As the temperature is becoming low during night time protect birds from cold by using polythene sheet or hessian cloth.	
Sheep/ Goat	age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
	required)	F.M.D.	- Vaccinate against F.M.D.	
		Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig	Above 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
	age (as and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buffa		Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.	
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:				
Type of Farming	Stage & Management	Agro-metrological advisor	ries	
Carp/	Harvesting and stock			
Catfish	maintenance	- Stock fish for next year and for this practices mentioned below may be done in small scale.		
culture		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.		
		- Feeds should be provided 1-2 times a day @ 2-3 % body weight per day.		
		<ul> <li>Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>		
		- Apply Green AQ @	4111re/ na or time @ 200kg/ na. Maintain good quality of pond water.	