

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



### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

# Weather forecast for next five days of Churachandpur $(10^{th} to 14^{th} January, 2014)$

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $22.0-25.0\,^{\circ}$ C & minimum temp.  $2.0-5.0\,^{\circ}$ C. Relative humidity may reach upto  $100\,\%$  (maximum RH) &  $41\,\%$  (minimum RH). The average wind speed may be  $4\text{-}7\,\text{km/}$  hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		J	
Rapeseed/ mustard	Vegetative to 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/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/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>
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops		J	
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, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth Leaf eating caterpillar	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)	sow	ving		started.	
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/ Turn	neric Har stor	vesting to rage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.	
Animal Scien	nces				
Name of the anim	al Growt	th stage	Disease/ infestation	Agro-meteorological advisories	
Poultry		sceptible age	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.	
	group	s (as and when red)	Ranikhet disease	<ol> <li>F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds.</li> <li>R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>	
			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 (a	Above 3 months of age (as and when	Ectoparasite	Use Butox liq. @ 2ml/4 litres of water and wash the animal with the solution.	
	requir	ed)	F.M.D.	- Vaccinate against F.M.D.	
			Deworming	- Give Albomac suspension @ 5ml per adult.	
Pig	Above	e 3 months of	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
		s and when	Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	requir	red)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.	
Cattle / Buffalo		e 3 months of	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (a requir	s and when	F.M.D.	- Vaccinate against F.M.D.	
	requir	cu)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.	
Fishery:			1	<del>,</del>	
Type of Stage & Management		Agro-metrological advisories			
Carp/ Catfish culture			<ul><li>Ponds should be free maintained at 1.0 - 1.5</li><li>Feeds should be prov</li><li>Well balanced feed feed</li></ul>	eason and for this practices mentioned below may be done in small scale.  e from unwanted vegetation and insects and water depth should be  5 m.  vided 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.	



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



#### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Imphal-East (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $23.0-24.0\,^{\circ}\text{C}$  & minimum temp.  $5.0-10.0\,^{\circ}\text{C}$ . Relative humidity may reach upto  $100\,\%$  (maximum RH) & 38 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
		infestation	
Field Crops	T	1	T
Rapeseed/	Vegetative to	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
mustard	flowering		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	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
Lentil)			- For organic control against aphid, sprays that consist of
,			Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of
			seeds and charcoal. Check for moisture content or weight of seeds.
			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, Sweatha).
	Head formation	Plutella, Daimond,	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water
	stage	Black Moth	at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)		sowing		started.
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/ Turn	neric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Scie	nces		J	
Name of the anim		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)	Ranikhet disease	<ol> <li>F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds.</li> <li>R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>
			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		Above 3 months of age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
	1	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.
	1	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo		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			Agro-metrological adviso	ries
Carp/ Catfish culture		naintenance	- Ponds should be free maintained at 1.0 - 1.5 - Feeds should be pro - Well balanced feed to	eason and for this practices mentioned below may be done in small scale. e from unwanted vegetation and insects and water depth should be 5 m. vided 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.



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



#### "Integrated Agromet Advisory Services"

### MANIPUR BULLETIN 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Imphal-West (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $21.0-23.0\,^{\circ}\text{C}$  & minimum temp.  $5.0-7.0\,^{\circ}\text{C}$ . Relative humidity may reach upto 97 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		<u> </u>	
Rapeseed/ mustard	Vegetative to 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/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/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>
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	ı	<u>'</u>	
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, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth Leaf eating caterpillar	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)	sowing		started.
Citrus	For nursery	leaf minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, t mite.	- Spray Confidor @ 0.5 ml/ lit of water.
Ginger/ Turm	Harvesting to storage	)	For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Scien	ices	<del></del>	
Name of the anima	al Growth stage	Disease/ infestat	tion Agro-meteorological advisories
Poultry	All susceptible a		Give Coximar @ 2g/lit of drinking water for 5-7 days.
	groups (as and v required)	Ranikhet diseas	se 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds.  2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers).  3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		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	Above 3 months age (as and whe		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 whe	n 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 / Buffalo/			Deworm using TolzanF @ 100ml/300kg body weight.
Mithun	age (as and whe required)	F.M.D.	- Vaccinate against F.M.D.
	required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:	,		
			advisories
Carp/ Stock maintenance Catfish culture		<ul><li>Ponds should be maintained at 1.0</li><li>Feeds should be</li><li>Well balanced f</li></ul>	next season and for this practices mentioned below may be done in small scale.  The free from unwanted vegetation and insects and water depth should be a continuous



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



### "Integrated Agromet Advisory Services"

### MANIPUR BULLETIN 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Senapati (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $17.0-20.0\,^{\circ}$ C & minimum temp.  $0.0-3.0\,^{\circ}$ C. Relative humidity may reach upto  $100\,\%$  (maximum RH) & 48 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to 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/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.</li> <li>For organic control against aphid, sprays that consist of</li> </ul>
Lentin)			Azadirachtin, Neem oil or Pyrethrin may be used.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops		<u>,                                      </u>	
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, Sweatha).
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/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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



## "Integrated Agromet Advisory Services"

Animal Sc	iences				
Name of the ar	imal Growth 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	n Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second		
	required)		dose may be given at 30days for all birds.		
			2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers).		
			3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).		
		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	Above 3 months of 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	lo/ 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.		
	requires	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.		
Fishery:					
Type of	Stage &	Agro-metrological advisor	ries		
Farming Carp/	Management Stock maintenance	Stock fish for payt se	eason and for this practices mentioned below may be done in small scale.		
Cat p/	Stock maintenance				
culture		maintained at 1.0 - 1.5	- Ponds should be free from unwanted vegetation and insects and water depth should be		
Culture			vided 1-2 times a day @ 2-3% body weight per day.		
			fortified with vitamins and minerals should be provided.		
			direction of the control of the cont		

- 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 9<sup>th</sup> January, 2015

#### **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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Tamenglong (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $25.0-27.0\,^{\circ}$ C & minimum temp.  $3.0-6.0\,^{\circ}$ C. Relative humidity may reach upto 97 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 5-7 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	1	J	1
Rapeseed/ mustard	Vegetative to	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
mustard	flowering	Hairy caterpillar	Pyrethrum @ 2ml/ litre of water on the infected patches.  - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/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>
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops		J.	
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, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth Leaf eating caterpillar	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)	sowing				started.	
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/ Turn	Harvesting storage	to			For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.	
Animal Scien	nces		<u> </u>			
Name of the anim	al Growth stage	I	Disease/ infestation		Agro-meteorological advisories	
Poultry	All susceptibl		Coccidiosis	Gi	ve Coximar @ 2g/lit of drinking water for 5-7 days.	
	groups (as and required)	when	Ranikhet disease	do: 2.	F-1 Strain may be first administered within 7 days of age and second se may be given at 30days for all birds.  R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers).  Killed ND virus vaccine of 16-18 weeks of age group birds (layers).	
		1	Management	- M ma - II - A day	Tix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter terial to prevent from caking.  Increase energy feed upto 5% (like maize, rice bran, etc.).  Increase energy feed upto 5% (like maize, rice bran, etc.).  Increase energy feed upto 5% (like maize, rice bran, etc.).  Increase energy feed upto 5% (like maize, rice bran, etc.).  Increase energy feed upto 5% (like maize, rice bran, etc.).	
					the temperature is becoming low during night time protect birds from ld by using polythene sheet or hessian cloth.	
Sheep/ Goat	Above 3 monage (as and w		Ectoparasite		e Butox liq. @ 2ml/ 4 litres of water and wash the animal with the ution.	
	required)		F.M.D.		accinate against F.M.D.	
		I	Deworming	- C	Give Albomac suspension @ 5ml per adult.	
Pig	Above 3 mon	hs of S	Skin infection	Gi	ve Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
	age (as and w	nen I	Deworming	- D	Deworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)	7	Γicks		d Butox liquid @ 2 ml/ lit of water and use the solution twice a week lile brushing the animal.	
Cattle / Buffalo			Deworming	De	worm using TolzanF @ 100ml/300kg body weight.	
Mithun	age (as and wi	nen I	F.M.D.	- V	accinate against F.M.D.	
	required)	7	Γicks/ Wounds	То	picure spray may be used twice daily on the affected parts.	
Fishery:	l .			1.		
Type of Stage & Management			Agro-metrological advisories			
Carp/ Catfish culture		- F ma - F - V	Ponds should be free aintained at 1.0 - 1.5 Feeds should be provi Well balanced feed for	from m. ided ortific	and for this practices mentioned below may be done in small scale.  a unwanted vegetation and insects and water depth should be  1-2 times a day @ 2-3% body weight per day.  ed with vitamins and minerals should be provided.  / 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 9<sup>th</sup> January, 2015

#### **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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Thoubal (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $19.0-21.0\,^{\circ}$ C & minimum temp.  $1.0-3.0\,^{\circ}$ C. Relative humidity may reach upto 100 % (maximum RH) & 43 % (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 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops		J	1
Rapeseed/ mustard	Vegetative to 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/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/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>
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops		J.	
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, Sweatha).
	Head formation stage to harvesting	Plutella, Daimond, Black Moth Leaf eating caterpillar	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water at 7 days interval.  Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)		sowing		started.
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/ Turmo	eric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Scien	ces	1	J.	
Name of the animal	1 (	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)	Ranikhet disease	<ol> <li>F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds.</li> <li>R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>
			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	á	Above 3 months of age (as and when	Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
	1	required)	F.M.D.	- Vaccinate against F.M.D.
			Deworming	- Give Albomac suspension @ 5ml per adult.
Pig	1	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.
	1	required)	Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/		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:	1			
Type of Farming Management  Carp/ Stock maintenance  Catfish culture		Agro-metrological advisori		
		<ul> <li>Ponds should be free maintained at 1.0 - 1.5</li> <li>Feeds should be provided with two shoulds are freed for the freed</li></ul>	ason and for this practices mentioned below may be done in small scale. From unwanted vegetation and insects and water depth should be m.  ded 1-2 times a day @ 2-3% body weight per day. rtified with vitamins and minerals should be provided. litre/ 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 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Ukhrul (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 17.0-20.0 °C & minimum temp. 0.0-3.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 46 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Vegetative to 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	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
Lentil)			- For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	1		
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, Sweatha).
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/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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



## "Integrated Agromet Advisory Services"

Name of the ar	imal Growth stage	Disease/ infestation	Agro-meteorological advisories		
Poultry	All susceptible a		Give Coximar @ 2g/lit of drinking water for 5-7 days.		
	groups (as and w	hen Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second		
	required)		dose may be given at 30days for all birds.		
			2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers).		
			3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).		
		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		2000 0 41 41 51 60	Use Butox liq. @ 2ml/4 litres of water and wash the animal with the		
	age (as and when		solution.		
	required)	F.M.D.	- Vaccinate against F.M.D.		
		Deworming	- Give Albomac suspension @ 5ml per adult.		
Pig	Above 3 months		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		De worming	Deworm using TolzanF @ 100ml/300kg body weight.		
Mithun	age (as and when required)	F.M.D.	- Vaccinate against F.M.D.		
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.		
Fishery:					
Type of Farming	Stage & Management	Agro-metrological advisories			
Carp/	Stock maintenance	- Stock fish for next se	eason and for this practices mentioned below may be done in small scale.		
Catfish		- Ponds should be free from unwanted vegetation and insects and water depth should be			
culture			maintained at 1.0 - 1.5 m.		
		- Feeds should be prov	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 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

# Weather forecast for next five days of Bishnupur (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $20.0-23.0\,^{\circ}$ C & minimum temp.  $3.0-7.0\,^{\circ}$ C. Relative humidity may reach upto  $100\,\%$  (maximum RH) &  $40\,\%$  (minimum RH). The average wind speed may be 2-6 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	2	infestation	
Field Crops		<u>!</u>	
Rapeseed/	Vegetative to flowering	Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
mustard		**	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	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
Lentil)			- For organic control against aphid, sprays that consist of
Dentil)			Azadirachtin, Neem oil or Pyrethrin may be used.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days
		Ambid	old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or
			Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon
			(mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and
			apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of
			seeds and charcoal. Check for moisture content or weight of seeds.
			After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	T	7	T
			After preparation for transplanting, 850 gm Urea, 2 kg DAP and 1kg
Cauliflower,	Transplanting		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
Cabbage & Broccoli	Transplanting		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, Sweatha).
	Head formation	Plutella, Daimond,	Farmers are advised to spray Dichlorovos 76 EC @ 1ml/ lit of water
	stage	Black Moth	at 7 days interval.
	to harvesting	Leaf eating caterpillar	Spray Flubendiamide (Fame) @ 2ml/ 10 lit of water.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)	sowing			S	started.	
Citrus	For nurs	ery	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/ Turmo	Harvest storage	-			For storing, prepare pit/ trench. Bottom layer should be covered wit river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.	
Animal Scien	ces		<u>,                                      </u>			
Name of the anima	l Growth sta	age	Disease/ infestation		Agro-meteorological advisories	
Poultry	All suscep		Coccidiosis	Give	e Coximar @ 2g/lit of drinking water for 5-7 days.	
	groups (as required)	and when	Ranikhet disease	dose 2. R	-1 Strain may be first administered within 7 days of age and second e may be given at 30days for all birds. <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). illed ND virus vaccine of 16-18 weeks of age group birds (layers).	
			Management	- Mi mate - Inc - Ad days	x deactivated lime powder @ 2 kg per 100 sq. ft. area in litter erial to prevent from caking. crease energy feed upto 5% (like maize, rice bran, etc.). Id antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 s along with vitamin A, vitamin B & vitamin C.	
					he temperature is becoming low during night time protect birds from by using polythene sheet or hessian cloth.	
Sheep/ Goat	age (as and	Above 3 months of age (as and when required)	Ectoparasite		Butox liq. @ 2ml/ 4 litres of water and wash the animal with the tion.	
	required)		F.M.D.		accinate against F.M.D.	
			Deworming	- Gi	ve Albomac suspension @ 5ml per adult.	
Pig	Above 3 m	Above 3 months of age (as and when required)	Skin infection	Give	e Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
			Deworming	- De	eworm using Piperazine citrate @ 30 ml per adult animal once.	
	required)		Ticks		Butox liquid @ 2 ml/ lit of water and use the solution twice a week le brushing the animal.	
Cattle / Buffalo/	Above 3 m		Deworming	Dew	vorm using TolzanF @ 100ml/300kg body weight.	
Mithun		age (as and when required)	F.M.D.	- Va	accinate against F.M.D.	
	required)		Ticks/ Wounds	Top	icure spray may be used twice daily on the affected parts.	
Fishery:	'			.,		
Farming M	e of Stage & Management		Agro-metrological advisories			
Carp/ Catfish culture		1	<ul> <li>Stock fish for next season 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 - 1.5 m.</li> <li>Feeds should be provided 1-2 times a day @ 2-3% body weight per day.</li> <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>			



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



#### "Integrated Agromet Advisory Services"

### MANIPUR BULLETIN 9<sup>th</sup> January, 2015

#### 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 10<sup>th</sup> to 14<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 8<sup>th</sup> January, 2015)

During past three days sky was mainly clear to partly cloudy but mainly cloudy during morning hours of  $8^{th}$  Jan, 15. **0.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 22.4-23.5 °C, range of minimum temperature observed was 4.6-9.6 °C, mean relative humidity observed in morning and afternoon were 82.67 % and 44.67 % respectively. The average wind speed range was 1.0-1.5 km/hr.

## Weather forecast for next five days of Chandel (10<sup>th</sup> to 14<sup>th</sup> January, 2014)

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of  $23.0-25.0\,^{\circ}\text{C}$  & minimum temp.  $7.0-8.0\,^{\circ}\text{C}$ . Relative humidity may reach upto 98 % (maximum RH) & 48 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 12th January, 2014

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	~	infestation	
Field Crops	I.	1	
Rapeseed/	Vegetative to 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.
mustard		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative	Aphid	<ul> <li>Spray Cypermethrin @2ml/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>
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	ı	1	
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, Sweatha).
	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.
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.
Local cucumber	Land preparation to		- Land preparation for sowing of local cucumber (kalen thabi) may be



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



(Kalenthabi)	sowing		started.		
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/ Turm	eric Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.		
Animal Scien	aces	J			
Name of the anima	d 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 wher required)	Ranikhet disease	<ol> <li>F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds.</li> <li>R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>		
		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	Above 3 months of 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 / Buffalo/	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:					
	Stage & Management	Agro-metrological advisories			
	Stock maintenance	<ul> <li>Stock fish for next season 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 - 1.5 m.</li> <li>Feeds should be provided 1-2 times a day @ 2-3% body weight per day.</li> <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>			