

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



#### "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto  $10^{th}$  Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6-21.9 °C, range of minimum temperature observed was 3.5-9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3 km/hr.

# Weather forecast for next five days of Senapati (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 - 20.0 °C & minimum temp. 0.0 -3.0 °C. Relative humidity may reach upto 98 % (maximum RH) & 33 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

Rain/thundershowers would occur at isolated places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	1		
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
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			
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.</li> </ul>
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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	nimal	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 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>
Sheep/ Goa	t	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intradermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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 / Buffa	alo/	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:			<u>,                                      </u>	
Type of Farming	Management Stock maintenance		Agro-metrological advisories	
Carp/ Catfish culture			<ul> <li>Ponds should be free from maintained at 1.0 - 1.5 m.</li> <li>Feeds should be provided</li> <li>Well balanced feed fortified</li> </ul>	n and for this practices mentioned below may be done in small scale. m unwanted vegetation and insects and water depth should be d 1-2 times a day @ 2-3% body weight per day. fied with vitamins and minerals should be provided. fied ha or lime @ 200kg/ ha. Maintain good quality of pond water.

(I. Meghachandra Singh) Scientist i/c, GKMS Phone: 2414654, 2414260, 2414749; Fax: (0385) 2414654, 2414749 E-mail: agromet\_mnp@yahoo.co.uk



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



#### "Integrated Agromet Advisory Services"

### MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Tamenglong (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 - 21.0°C & minimum temp. 0.0 – 3.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 3-5 km/ hr during next five days.

#### Weather Forecast for next 3 days \* 0830 hours IST of 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	-		
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		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			
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim</li> <li>\$\text{5g}/3\text{m}^2\$ area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/3m² area keep the bed covered with gunny bag.</li> </ul>



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



Local cucui (Kalenthab		Land preparation t	50	- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Tu	rmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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 Sci		T -:		
Name of the an	imal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry		All susceptible age groups (as and wher	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		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>
Sheep/ Goat		Above 3 months of	Contagious Caprine	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-
		age (as and when required)	Pluero-pneumonia (CCPP) in goat	dermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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 / 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.
		required)	Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			J	
Type of			Agro-metrological advisories	
Farming Carp/			Stock fish for next seese	n and for this practices mentioned below may be done in small scale.
Carp/ Catfish				m unwanted vegetation and insects and water depth should be
culture			naintained at 1.0 - 1.5 m.	in an wanted regetation and insects and water depair should be
				d 1-2 times a day @ 2-3% body weight per day.
		-	Well balanced feed fortif	ried with vitamins and minerals should be provided.
				e/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.



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### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West $(9^{th} \ to \ 12^{th} \ January, 2015)$

During past four days sky was mainly cloudy to cloudy upto  $10^{th}$  Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6-21.9 °C, range of minimum temperature observed was 3.5-9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3 km/hr.

# Weather forecast for next five days of Thoubal (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of  $21.0-22.0\,^{\circ}$ C & minimum temp.  $4.0-5.0\,^{\circ}$ C. Relative humidity may reach upto 99 % (maximum RH) & 38 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		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	1		, , , , , ,
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim</li> <li>6 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/3m² area keep the bed covered with gunny bag.</li> </ul>



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Local cucu (Kalenthal		Land preparation sowing	to	- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Tu	ırmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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 So			,	
Name of the a	nimal	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>
Sheep/ Goa	ıt	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intradermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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	alo/	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	J.	1
Type of			Agro-metrological advisories	
Farming Carp/			Stock fish for next seaso	n and for this practices mentioned below may be done in small scale.
Catfish culture	Stock			m unwanted vegetation and insects and water depth should be
				d 1-2 times a day @ 2-3% body weight per day.
				ried with vitamins and minerals should be provided.
			- Apply Green AQ @ 4litr	e/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.



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#### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto  $10^{th}$  Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6-21.9 °C, range of minimum temperature observed was 3.5-9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3 km/hr.

# Weather forecast for next five days of Ukhrul (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 - 20.0 °C & minimum temp. 1.0 - 3.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 37 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

Rain/thundershowers would occur at isolated places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	Azadirachtin, Neem oil or Pyrethrin may be used.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
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			
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.</li> </ul>
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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.



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# "Integrated Agromet Advisory Services"

Animal Sci				
Name of the an	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 who	en 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</li> </ol>
				(layers).
			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>
Sheep/ Goat		Above 3 months o age (as and when required)	f Contagious Caprine Pluero-pneumonia (CCPP) in goat	
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months o	f Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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 / Buffa	lo/	Above 3 months o	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:		•	<del>,</del>	
Type of Farming	Stage & Management		Agro-metrological advisories	
Carp/ Catfish	Stock 1	maintenance		on and for this practices mentioned below may be done in small scale.  om unwanted vegetation and insects and water depth should be
culture			maintained at 1.0 - 1.5 m - Feeds should be provide	
				tre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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#### MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Bishnupur (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 - 21.0 $^{\circ}$ C & minimum temp. 4.0-5.0  $^{\circ}$ C. Relative humidity may reach upto 99 % (maximum RH) & 38 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		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	_		
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim</li> <li>6 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/3m² area keep the bed covered with gunny bag.</li> </ul>



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



# "Integrated Agromet Advisory Services"

Local cucur		Land preparation t	0	- Land preparation for sowing of local cucumber (kalen thabi) may be
(Kalenthabi	/	sowing		started.
Ginger/ Tur	rmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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.
4 . 10 .	•			Protect them from rain.
Animal Sci		Countly at a se	Disease/ infestation	A
	111141	Growth stage All susceptible age	Coccidiosis	Agro-meteorological advisories
Poultry		groups (as and when		Give Coximar @ 2g/lit of drinking water for 5-7 days.
		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>
Sheep/ Goat		Above 3 months of	Contagious Caprine	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-
•		age (as and when required)	Pluero-pneumonia (CCPP) in goat	dermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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 / Buffa	lo/	Above 3 months of	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 & Ag Management		Agro-metrological advisories	
Carp/ Catfish culture	/ Stock maintenance - sh re n		Ponds should be free from maintained at 1.0 - 1.5 m. Feeds should be provided	n and for this practices mentioned below may be done in small scale. m unwanted vegetation and insects and water depth should be 1 1-2 times a day @ 2-3% body weight per day.
				ied with vitamins and minerals should be provided.
		-	Apply Green AQ @ 4litr	e/ 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** 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Chandel (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 - 22.0°C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 41 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		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	•	*	
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>Sow seeds @ 10g/3m² area keep the bed covered with gunny bag.</li> </ul>



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



Local cucu (Kalenthal		Land preparation sowing	to	- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Tu	ırmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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 So				
Name of the a	nimal	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>
Sheep/ Goa	ıt	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intradermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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	alo/	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	J	1
Type of			Agro-metrological advisories	
Farming Carp/			- Stock fish for next season	n and for this practices mentioned below may be done in small scale.
Catfish culture	fish			m unwanted vegetation and insects and water depth should be
				d 1-2 times a day @ 2-3% body weight per day.
				ried with vitamins and minerals should be provided.
			- Apply Green AQ @ 4litr	e/ 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** 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Churachandpur (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 °C & minimum temp. 3.0 - 5.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five

#### Weather Forecast for next 3 days \* 0830 hours IST of 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
			Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval
			as soon as the symptoms start appearing on the plants for Downy
			Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the
			infected patches only.
Pulses	Vegetative to	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected
(Field pea/	flowering		patches only.
Lentil)			- For organic control against aphid, sprays that consist of
		D 1 1611	Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap
Datata	Vegetative		(Karathane 46% EC) @ 7.5ml/ pump.  Earthing up may be done when the plant is 15cm high (or 35days)
Potato	vegetative		old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon
		Cut worm	(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	·		
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse.
			- Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim
			@ 5g/3m <sup>2</sup> area, keep the bed covered with gunny bag for at least 24
			hrs.
			- Sow seeds @ 10g/3m <sup>2</sup> area keep the bed covered with gunny bag.



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



Local cucun (Kalenthabi	cal cucumber Land preparation sowing		)	- Land preparation for sowing of local cucumber (kalen thabi) may be started.	
Ginger/ Tur	rmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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 Sci					
Name of the ani	imal	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>	
Sheep/ Goat		Above 3 months of	Contagious Caprine	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-	
•		age (as and when required)	Pluero-pneumonia (CCPP) in goat	dermally.	
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.	
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
		required)	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 / Buffalo/		Above 3 months of	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:					
Type of Farming	Management		gro-metrological advisories		
		maintenance -	Stock fish for next season and for this practices mentioned below may be done in small scale. Ponds should be free from unwanted vegetation and insects and water depth should be naintained at 1.0 - 1.5 m.		
		-	<ul> <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> </ul>		
				e/ 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** 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Imphal-East (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 24.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 34 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Pyrethrum @ 2ml/ litre of water on the infected patches.  Downy Mildew Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 da as soon as the symptoms start appearing on the plants for l Mildew Hairy caterpillar  - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  Pulses (Field pea/ flowering  Lentil)  Powdery Mildew Powdery Mildew Powdery Mildew Powdery Mildew Powdery Mildew For a yangle done when the plant is 15cm high (or old).  Cut worm Fit cut worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water apply manually by putting near the stem of plant above the surface.  Storage  Storage  For and store the seeds in RC-seed bins after prope seeds and charcoal. Check for moisture content or weig after proper drying, store grains/ seeds in well ventilated as the formation of the plant of the proper drying, store grains/ seeds in well ventilated as the formation of the proper drying, store grains/ seeds in well ventilated as the proper drying is to grains as the proper drying is to grain as the proper drying	Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Do not irrigate as there is likely of rain on Saturday.	Field Crops			
Aphid  Aphid  - Use yellow plates for every 3 sq.m to attract the aphids of Pyrethrum @ 2ml/ litre of water on the infected patches.  Downy Mildew  Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 da as soon as the symptoms start appearing on the plants for I Mildew.  Hairy caterpillar  - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  Pulses  (Field pea/ Lentil)  Aphid  - Spray Cypermethrin @2ml/lit of water against aphid on patches only.  - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.  Powdery Mildew  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Potato  Vegetative  - Spray Cypermethrin @2ml/lit of water against aphid on patches only.  - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Cut worm  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  - Spray Bayleton (Triaclemofon 25%W	Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
Pyrethrum @ 2ml/ litre of water on the infected patches.  Downy Mildew Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 da as soon as the symptoms start appearing on the plants for l Mildew.  Hairy caterpillar Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  Pulses (Field pea/ Lentil) Aphid Spray Cypermethrin @2ml/lit of water against aphid on patches only. Spray Cypermethrin @2ml/lit of water against aphid on patches only. Spray Cypermethrin @2ml/lit of water against aphid on patches only. Spray Sayleton (Triaclemofon 25% WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Potato Vegetative Storage Storage Storage Cut worm Storage St	mustard	formation		Do not irrigate as there is likely of rain on Saturday.
Downy Mildew   Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 da as soon as the symptoms start appearing on the plants for I Mildew.			Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray
as soon as the symptoms start appearing on the plants for I Mildew.  Hairy caterpillar - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  Pulses (Field pea/ I flowering - Spray Cypermethrin @2ml/lit of water against aphid on patches only.  Powdering - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.  Powdery Mildew - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Potato - Vegetative - Earthing up may be done when the plant is 15cm high (or old).  Cut worm - If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water apply manually by putting near the stem of plant above the surface.  Storage - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weig after proper drying, store grains/ seeds in well ventilated and the proper drying, store grains/ seeds in well ventilated and the proper drying, store grains/ seeds in well ventilated and the proper drying is store grains/ seeds in well ventilated and the proper drying is store grains and store the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated and the proper drying is store grains and store the seeds in RC-seed bins after proper drying is store grains and grain an				
Mildew.   Hairy caterpillar   - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.   - Spray Cypermethrin @2ml/lit of water against aphid on patches only.   - Spray Cypermethrin @2ml/lit of water against aphid on patches only.   - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.   Powdery Mildew   - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.   Potato   Earthing up may be done when the plant is 15cm high (or old).   Cut worm   If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water apply manually by putting near the stem of plant above the surface.   Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weight after proper drying, store grains/ seeds in well ventilated after proper drying, store grains/ seeds in well ventilated after proper drying. Sowing   - Tomato nurseries should be raised under low cost polyhor.			Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval
Hairy caterpillar  - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  Pulses (Field pea/ Lentil)  Powdery Mildew  Powdery Mildew  Powdery Mildew  Cut worm  Cut worm  Storage  Storage  Hairy caterpillar  - Spray Quinalphos or Chloropyriphos @ 2ml/litre of water infected patches only.  - Spray Cypermethrin @2ml/lit of water against aphid on patches only.  - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.  - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Earthing up may be done when the plant is 15cm high (or old).  Cut worm  If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water apply manually by putting near the stem of plant above the surface.  Storage  - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weigh After proper drying, store grains/ seeds in well ventilated grains.  Horticulture Crops  Tomato  Sowing  - Tomato nurseries should be raised under low cost polyhors.				as soon as the symptoms start appearing on the plants for Downy
Infected patches only.   Pulses   Vegetative to   flowering   Aphid   - Spray Cypermethrin @2ml/lit of water against aphid on patches only.   - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.   Powdery Mildew   - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.				
Pulses   Vegetative to flowering   Aphid   - Spray Cypermethrin @2ml/lit of water against aphid on patches only.   - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.   Powdery Mildew   - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.   Earthing up may be done when the plant is 15cm high (or old).   Cut worm   If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water apply manually by putting near the stem of plant above the surface.   - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weigh After proper drying, store grains/ seeds in well ventilated at the standard of the standar			Hairy caterpillar	
Potato   Flowering   Patches only.   For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.   Powdery Mildew   Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.   Earthing up may be done when the plant is 15cm high (or old).				
Lentil)  - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.  Powdery Mildew - Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump (Karathane 46% EC) @ 7.5ml/ pump.  Potato  Vegetative - Earthing up may be done when the plant is 15cm high (or old).  Cut worm - If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + wate apply manually by putting near the stem of plant above the surface.  Storage - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weig After proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying, store grains/ seeds in well ventilated after the seeds in RC-seed bins after proper drying.			Aphid	
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Potato  Potato  Vegetative  Cut worm  Cut worm  Storage  Storage  Formula to Storage  Powdery Mildew  Potato	Lentii)			
Potato  Vegetative  Earthing up may be done when the plant is 15cm high (or old).  Cut worm  If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + wate apply manually by putting near the stem of plant above the surface.  Storage  - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weigh After proper drying, store grains/ seeds in well ventilated and the store that the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in the			Douglass Mildon	
Potato  Vegetative  Earthing up may be done when the plant is 15cm high (or old).  Cut worm  If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + wate apply manually by putting near the stem of plant above the surface.  Storage  - Clean and store the seeds in RC-seed bins after prope seeds and charcoal. Check for moisture content or weig After proper drying, store grains/ seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the store of the seeds in well ventilated and the seeds in the seeds in well ventilated and the seeds in t			rowdery Willdew	
Old).  Cut worm  If cut-worm is observed then prepare poison bait of Trichl (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + wate apply manually by putting near the stem of plant above the surface.  Storage  - Clean and store the seeds in RC-seed bins after prope seeds and charcoal. Check for moisture content or weig After proper drying, store grains/ seeds in well ventilated and the storage of the seeds in the see	Potato	Vegetative		
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apply manually by putting near the stem of plant above the surface.  Storage  - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weigned After proper drying, store grains/ seeds in well ventilated after proper drying.  Horticulture Crops  Tomato  Sowing  - Tomato nurseries should be raised under low cost polyhouse.			Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon
Storage  - Clean and store the seeds in RC-seed bins after proper seeds and charcoal. Check for moisture content or weign After proper drying, store grains/ seeds in well ventilated after proper drying, store grains/ seeds in well ventilated after proper drying.  Horticulture Crops  Tomato  Sowing  - Tomato nurseries should be raised under low cost polyhouse.				(mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and
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seeds and charcoal. Check for moisture content or weight After proper drying, store grains/ seeds in well ventilated and the seeds i				
After proper drying, store grains/ seeds in well ventilated at the control of the	Storage			- Clean and store the seeds in RC-seed bins after proper drying of
Horticulture Crops       Tomato     Sowing     - Tomato nurseries should be raised under low cost polyhous				seeds and charcoal. Check for moisture content or weight of seeds.
Tomato Sowing - Tomato nurseries should be raised under low cost polyho				After proper drying, store grains/ seeds in well ventilated godowns.
	•		7	<u> </u>
	Tomato	Sowing		
				- Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim
brs.				@ 5g/3m <sup>2</sup> area, keep the bed covered with gunny bag for at least 24
				- Sow seeds @ 10g/3m <sup>2</sup> area keep the bed covered with gunny bag.



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



		Land preparation t	0	- Land preparation for sowing of local cucumber (kalen thabi) may be
(Kalenthabi	/	sowing		started.
Ginger/ Tur	meric	Harvesting to storage		For storing, prepare pit/trench. Bottom layer should be covered with river bed soil (20 cm 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 Sci	ences			Trotter them from runn
Name of the ani		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>
Sheep/ Goat		Above 3 months of	Contagious Caprine	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-
		age (as and when required)	Pluero-pneumonia (CCPP) in goat	dermally.
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		required)	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 / Buffalo/ Mithun		Above 3 months of	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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:			, <u> </u>	
Type of Farming	Management  Stock maintenance - S - P ma - F - W		Agro-metrological advisories	
Carp/ Catfish culture			Stock fish for next season and for this practices mentioned below may be done in small scale. Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.  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 @ 4litr	e/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

Phone: 2414654, 2414260, 2414749; Fax: (0385) 2414654, 2414749 E-mail: agromet\_mnp@yahoo.co.uk



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



#### "Integrated Agromet Advisory Services"

#### MANIPUR BULLETIN 13<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 14<sup>th</sup> to 18<sup>th</sup> January, 2014 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 12<sup>th</sup> January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10<sup>th</sup> Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 - 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0-2.3

#### Weather forecast for next five days of Imphal-West (14<sup>th</sup> to 18<sup>th</sup> January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 - 22.0°C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 96 % (maximum RH) & 33 % (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 16<sup>th</sup> January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days \*

Fog would occur at isolated places over Manipur on 13<sup>th</sup> and 14<sup>th</sup> January, 2015.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	-	<u>.</u>	
Rapeseed/	Flowering to pod		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing.
mustard	formation		Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	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>
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		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			
Tomato	Sowing		<ul> <li>Tomato nurseries should be raised under low cost polyhouse.</li> <li>Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim</li> <li>\$\textit{5g}/\text{3m}^2\text{ area, keep the bed covered with gunny bag for at least 24 hrs.}</li> <li>Sow seeds @ 10g/\text{3m}^2\text{ area keep the bed covered with gunny bag.}</li> </ul>



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



Local cucu (Kalenthal	habi) sowing		50	- Land preparation for sowing of local cucumber (kalen thabi) may be started.	
Ginger/ Tu	ırmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm 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 Sc					
Name of the a	nimal	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>	
Sheep/ Goat		Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intradermally.	
			Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.	
Pig		Above 3 months of	Swine Fever	- Vaccinate against swine fever after the age of 3 months.	
		age (as and when	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.	
		required)	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 / Buffalo/ Mithun		Above 3 months of	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.	
		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:			J		
Type of	Stage & Ag Management		Agro-metrological advisories		
Farming Carp/			- Stock fish for next season and for this practices mentioned below may be done in small scale.		
Catfish culture	ish		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.		
			- Feeds should be provided 1-2 times a day @ 2-3% body weight per day.		
				ried with vitamins and minerals should be provided.	
			· Apply Green AQ @ 4litr	re/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	