



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Chandel (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 25.0 °C & minimum temp. 4.0 – 6.0 °C. Relative humidity may reach upto 92 % (maximum RH) & 31 % (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Siliqua formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Churachandpur (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 24.0 °C & minimum temp. 4.0 – 6.0 °C. Relative humidity may reach upto 91 % (maximum RH) & 25% (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Siliqua formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Imphal-East (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 24.0 °C & minimum temp. 5.0 – 6.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Siliqua formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.





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<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

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**Weather forecast for next five days of Imphal-West (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 26.0 °C & minimum temp. 4.0 – 6.0 °C. Relative humidity may reach upto 93 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 2-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Silique formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
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<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	<ol style="list-style-type: none"> <li>1. 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>2. R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. **No** rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Senapati (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 – 22.0 °C & minimum temp. 2.0 – 5.0 °C. Relative humidity may reach upto 94 % (maximum RH) & 22% (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Silique formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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



**“Integrated Agromet Advisory Services”**

Onion/ Garlic	Bulb formation		- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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/ Catfish culture	Stock 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 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 @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Tamenglong (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 26.0 °C & minimum temp. 5.0 – 8.0 °C. Relative humidity may reach upto 90 % (maximum RH) & 23% (minimum RH). The average wind speed may be 3-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Siliqua formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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



**“Integrated Agromet Advisory Services”**

<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	<ol style="list-style-type: none"> <li>1. 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>2. R<sub>2</sub>B vaccine of 8-9 weeks of age group birds (layers).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).</li> </ol>
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Thoubal (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 – 25.0 °C & minimum temp. 4.0 – 6.0 °C. Relative humidity may reach upto 94 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Silique formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.





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



**“Integrated Agromet Advisory Services”**

<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. **No** rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Ukhrul (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 – 22.0 °C & minimum temp. 2.0 – 5.0 °C. Relative humidity may reach upto 94 % (maximum RH) & 27% (minimum RH). The average wind speed may be 3-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Silique formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

Onion/ Garlic	Bulb formation		- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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/ Catfish culture	Stock 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 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 @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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**MANIPUR BULLETIN**

**6<sup>th</sup> February, 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 7<sup>th</sup> to 11<sup>th</sup> February, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> February, 2015)**

During past three days sky was mainly clear but mainly cloudy during afternoon hours of 5<sup>th</sup> February. No rainfall was recorded during past three days. Maximum temperature range observed was 24.4 – 25.5 °C, range of minimum temperature observed was 3.5 – 5.4 °C, mean relative humidity observed in morning and afternoon were 84.7 % and 41.0 % respectively. The average wind speed range was 1.7 – 2.5 km/hr.

**Weather forecast for next five days of Bishnupur (7<sup>th</sup> to 11<sup>th</sup> February, 2015)**

There may be no rain upto Wednesday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 25.0 °C & minimum temp. 5.0 – 8.0 °C. Relative humidity may reach upto 89 % (maximum RH) & 24 % (minimum RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rapeseed/ mustard</b>	Silique formation to maturity		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
<b>Pulses (Field pea/ Lentil)</b>	Fruiting and maturity	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only.
		Powdery Mildew	- Spray Bayleton (Triademefon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
<b>Pre-kharif Rice</b>	Land Preparation		- Prepare 700 m <sup>2</sup> area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m <sup>2</sup> at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
<b>Rabi Maize</b>	Vegetative		- Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
<b>Storage</b>			- Dry, 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.
<b>Horticulture Crops</b>			
<b>Cucurbits</b>	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. - Light watering must be done for already transplanted seedlings during morning hours.



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<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase.</li> <li>- If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.</li> </ul>
<b>Potato</b>	Tuber formation to maturity		<ul style="list-style-type: none"> <li>- For seed purpose: <ul style="list-style-type: none"> <li>- Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll.</li> <li>- Maturity days should be strictly maintained as per variety.</li> </ul> </li> <li>- Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	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	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		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
<b>Carp/ Catfish culture</b>	Stock maintenance	<ul style="list-style-type: none"> <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>

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