



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Churachandpur (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 100 % (max RH) & 74 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be southerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

I. Meghachandra Singh  
Scientist i/c, IAAS



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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Imphal - East (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 60 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desicant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
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<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

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**MANIPUR BULLETIN**

**4<sup>th</sup> September, 2015**

**Imphal-West**

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**Weather forecast for next five days of Imphal - West (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 62 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball





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**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

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**Weather forecast for next five days of Senapati (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 25.0 – 28.0 °C & minimum temp. 18.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 58 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

I. Meghachandra Singh  
Scientist i/c, IAAS





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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Tamenglong (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 100 % (max RH) & 68 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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



**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

I. Meghachandra Singh  
Scientist i/c, IAAS



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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Thoubal (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 21.0 – 22.0 °C. Relative humidity may reach upto 99 % (max RH) & 71 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<b>* Avoid birds and animal to drink muddy rain water.</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <b>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</b></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

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Scientist i/c, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Ukhrul (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 25.0 – 28.0 °C & minimum temp. 18.0 – 20.0 °C. Relative humidity may reach upto 99 % (max RH) & 77 % (min RH). The average wind speed may be 2-3 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball





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



**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

I. Meghachandra Singh  
Scientist i/c, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Bishnupur (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach upto 99 % (max RH) & 70 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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



**“Gramin Krishi Mausam Seva”**

Cauliflower	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
Animal Sciences			
* Avoid birds and animal to drink muddy rain water.			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Contingency plan and management	- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days. - Give green grasses sufficiently & mix with ground maize/ rice bran. - Add mineral mixture & vitamins either in feed or water or both. - At least use turpauline sheet for shelter of sites. - Add water sanitizer in drinking water/ or add potash.
Sheep/ Goat	Above 3 months of age	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
Pig	All age groups	Management	- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet. - Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides. - Give Amoxyline/ Salbactum or any antibiotic for 5 days. - Provide wholesome water.
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			- Shift the animals in higher elevated site. - Give Amoxyline/ Salbactum or any antibiotic for 5 days. - Add mineral mixture & vitamins either in feed or water or both. - Add water sanitizer in drinking water/ or add potash.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

I. Meghachandra Singh  
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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**4<sup>th</sup> September, 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 5<sup>th</sup> to 9<sup>th</sup> September, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (1<sup>st</sup> to 3<sup>rd</sup> September, 2015)**

During last three days sky was partly cloudy to cloudy. **66.8 mm** rainfall was recorded during last three days. Maximum temperature range observed was 27.4 – 28.4 °C, range of minimum temperature observed was 21.5 – 22.5 °C, mean relative humidity observed in morning and afternoon were 97 % and 81 % respectively. The average wind speed range was 1.9 – 7.9 km/hr.

**Weather forecast for next five days of Chandel (5<sup>th</sup> to 9<sup>th</sup> September, 2015)**

There may be light rain upto Wednesday. Sky will remain partly cloudy to cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 74 % (min RH). The average wind speed may be 3-4 km/ hr during next five days. The Wind direction may be south-westerly to westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative to panicle initiation		- In upland area, hand weeding may be done. Maintain water depth of 5cm in the rice field. - During panicle initiation stage, apply 33kg Urea/ ha.
		Sucking insect	Imidachloprid @ 4-7 ml/ 15 litres of water.
		Stem borer	Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Stem rot	Spray Validamycin 3L @ 2.5 ml/lit or Thiophanate methyl 75 WP @ 1 g/ lit of water
<b>Soybean</b>	Flowering to fruiting		- Maintain proper drainage system to avoid water logging.
		Rust	- Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
<b>Groundnut</b>	Flowering to pegging		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar after rain. Drain out excess water.
		Tikka disease	- Monitor infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing.
<b>Storage (seed)</b>			- Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains store in well ventilated godowns with regular check for moisture.
<b>Horticulture Crops</b>			
<b>*Avoid water logging in and around the crop field.</b>			
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source. Foothills/ hill slope areas are desirable site for establishment of new orchards.
<b>Citrus</b>	Grown up trees		- Kill the trunk borer if observed. - Clean the bore holes of the infested trunk with the iron wire. Insert the cotton swab soaked in Dichlorovos or inject 5ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud. - Apply lime (@2-2.5kg/ tree in a circular trench around the trunk in alternate years.
<b>Cabbage</b>	Vegetative (early crop)		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by application of 46 kg Urea in two splits, one at 20days and another at 40-45 days after transplanting.
	Nursery		Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- Rare Ball



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**“Gramin Krishi Mausam Seva”**

<b>Cauliflower</b>	Vegetative (early crop)  Nursery		Apply 5 tones (10 cart loads) of FYM, 50 kg DAP, 25 Kg MOP as basal dose followed by 35-45 kg Urea in two splits, one at 20days and another at 35 days after transplanting. Prepare bed for raising nursery where there is good sunshine and no water logging problem. Recommended variety- White Flash
<b>Animal Sciences</b>			
<i>* Avoid birds and animal to drink muddy rain water.</i>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry (Chicken/ Turkey/ Duck)</b>	All age groups	Contingency plan and management	<ul style="list-style-type: none"> <li>- Give ENROX liq. @ 2ml/ 10 kg body weight for 5 days.</li> <li>- Give green grasses sufficiently &amp; mix with ground maize/ rice bran.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- At least use turpauline sheet for shelter of sites.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Sheep/ Goat</b>	<b>Above 3 months of age</b>	Vaccination	- Vaccinate against Enterotoxaemia/ M.C.C.V. (left overs).
		Deworming	- Give Fasinex @ 3ml/kg b.wt.
<b>Pig</b>	All age groups	Management	<ul style="list-style-type: none"> <li>- Keep the animals in higher elevated site and use roofing materials like turpauline/ polythene sheet.</li> <li>- Disinfect the shelter sites/ premises using disinfectants like Malathion/ any insecticides.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Provide wholesome water.</li> </ul>
		Ticks/ mites	- Use Butox @ 2 ml in 1 lit of water & Topicure spray if wound is there.
<b>Cattle / Buffalo/ Mithun</b>	<b>Above 3 months of age (as and when required)</b>	Vaccination	- Vaccinate against B.Q.
		Spray against ticks etc.	Spray any acaricides.
			<ul style="list-style-type: none"> <li>- Shift the animals in higher elevated site.</li> <li>- Give Amoxyline/ Salbactam or any antibiotic for 5 days.</li> <li>- Add mineral mixture &amp; vitamins either in feed or water or both.</li> <li>- Add water sanitizer in drinking water/ or add potash.</li> </ul>
<b>Fishery:</b>			
<ul style="list-style-type: none"> <li>• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i></li> </ul>			
<b>Type of Farming</b>	<b>Stage</b>	<b>Management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.

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