



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Senapati (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 25.0 – 28.0 °C & minimum temp. 15.0 – 19.0 °C. Relative humidity may reach upto 99 % (max RH) & 61 % (min RH). The average wind speed may be 0-2 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

I. Meghachandra Singh  
Scientist i/c, IAAS



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Tamenglong (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 31.0 °C & minimum temp. 18.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 71 % (min RH). The average wind speed may be 0-2 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

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During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Thoubal (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 31.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach upto 100 % (max RH) & 78 % (min RH). The average wind speed may be 0-4 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
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<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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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<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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Scientist i/c, IAAS



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**10<sup>th</sup> July, 2015**

**Ukhrul**

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**Weather forecast for next five days of Ukhrul (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

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<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
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<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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



**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<b>Fishery:</b>			
• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i>			
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Bishnupur (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 31.0 °C & minimum temp. 20.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 76 % (min RH). The average wind speed may be 0-4 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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



**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<b>Fishery:</b>			
• <i>Encircle fish ponds with happa net to avoid escape of fishes during rainy days.</i>			
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Chandel (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 31.0 °C & minimum temp. 18.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 82 % (min RH). The average wind speed may be 2-5 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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



**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Churachandpur (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 31.0 °C & minimum temp. 20.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 81 % (min RH). The average wind speed may be 0-3 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthracnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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



**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**

**10<sup>th</sup> July, 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 11<sup>th</sup> to 15<sup>th</sup> July, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (7<sup>th</sup> to 9<sup>th</sup> July, 2015)**

During last three days sky was partly cloudy to mainly cloudy. **35.6 mm** rainfall was recorded during last three days. Maximum temperature range observed was 26.3 – 27.8 °C, range of minimum temperature observed was 20.6 – 23.9 °C, mean relative humidity observed in morning and afternoon were 85.30 % and 80.67 % respectively. The average wind speed range was 4.1 – 5.1 km/hr.

**Weather forecast for next five days of Imphal - East (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 28.0 – 30.0 °C & minimum temp. 21.0 – 22.0 °C. Relative humidity may reach upto 100 % (max RH) & 68 % (min RH). The average wind speed may be 0-3 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
<b>Soybean/ Groundnut</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
<b>Storage (seed)</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>			
<ul style="list-style-type: none"> <li>• <i>Sprays mentioned below may be done after rains only.</i></li> <li>• <i>Make proper drainage to avoid water logging.</i></li> </ul>			
<b>Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean</b>	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
<b>Ornge/ Lemon</b>	Vegetative		- Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk.
<b>Passion Fruit</b>	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb@ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
<b>Pineapple</b>	Fruiting		Spray Zineb @ 2g/lit of water.
<b>Papaya</b>	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 <sup>th</sup> ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.



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**“Gramin Krishi Mausam Seva”**

<b>Animal Sciences</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	Management	- Repair the roof of the shed and leakage, if any, it will cause caking of the litter. Avoid ammonia by using lime powder @ 4-5 kg per 100 sq. ft. - Use any water sanitizer/ Potassium permanganate in drinking water.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Use Piperazine liquid @ 40-50 for 100 adult birds.
<b>Sheep/ Goat</b>	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
<b>Pig</b>	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
<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. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		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.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
<b>Integrated Fish Farming</b>	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**MANIPUR BULLETIN**

**10<sup>th</sup> July, 2015**

**Imphal-West**

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**Weather forecast for next five days of Imphal - West (11<sup>th</sup> to 15<sup>th</sup> July, 2015)**

There may be light to moderate during next five days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 27.0 – 30.0 °C & minimum temp. 20.0 – 23.0 °C. Relative humidity may reach upto 99 % (max RH) & 66 % (min RH). The average wind speed may be 0-2 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>Pre-kharif Rice</b>	Harvesting stage and post-harvesting		- Harvest rice after rain when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
<b>Kharif Rice</b>	Vegetative		- Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. - Weed control: Apply Butachlor @ 25 kg/ ha within one week of transplanting after rain.
<b>Kharif maize</b>	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
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