



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

7th 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Churachandpur (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 26.0 – 29.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 100 % (max RH) & 89 % (min RH). The average wind speed may be 0-3 km/ hr during next five days. The Wind direction may be north-easterly or easterly on 8th & 11th and south westerly to westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



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		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.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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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“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

7th 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Imphal - East (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 27.0 – 32.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 99 % (max RH) & 88 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be north-easterly or easterly on 8th & 11th and south westerly to westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



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		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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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Imphal-West

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Weather forecast for next five days of Imphal - West (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 27.0 – 32.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 99 % (max RH) & 85 % (min RH). The average wind speed may be 0-2 km/ hr during next five days. The Wind direction may be easterly on 8th & 11th and south westerly to westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
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Orange/ Lemon	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.
Passion Fruit	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.



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		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
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Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @ 2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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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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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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.
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7th 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 8th to 12th July, 2015 as below:

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Weather forecast for next five days of Senapati (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 23.0 – 27.0 °C & minimum temp. 14.0 – 19.0 °C. Relative humidity may reach upto 99 % (max RH) & 91 % (min RH). The average wind speed may be 2 km/ hr during next five days.

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Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
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Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



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“Gramin Krishi Mausam Seva”

		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.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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

7th 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Tamenglong (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 25.0 – 30.0 °C & minimum temp. 19.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 90 % (min RH). The average wind speed may be 2 km/ hr during next five days. The Wind direction may be south-easterly or easterly on 8th & 11th and south westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



**ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”

		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.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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

7th 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Thoubal (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 26.0 – 28.0 °C & minimum temp. 19.0 – 21.0 °C. Relative humidity may reach upto 100 % (max RH) & 96 % (min RH). The average wind speed may be 0-2 km/ hr during next five days. The Wind direction may be north-easterly or easterly on 8th & 11th and south westerly to westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



**ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”

		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.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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
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**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

7th July, 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Ukhrul (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 23.0 – 27.0 °C & minimum temp. 15.0 – 19.0 °C. Relative humidity may reach upto 99 % (max RH) & 95 % (min RH). The average wind speed may be 2 km/ hr during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		- Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		- For Direct seeded crop: a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		- Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			- 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.
Horticulture Crops			
<ul style="list-style-type: none"> Sprays mentioned below may be done after rains only. Make proper drainage to avoid water logging. 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



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



“Gramin Krishi Mausam Seva”

		Fruit fly	Apply poison baiting with Jaggery + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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

7th 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 8th to 12th July, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (3rd to 6th July, 2015)

During last four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy during afternoon hours of 4th & 6th July. **30.7 mm** rainfall was recorded during last four days. Maximum temperature range observed was 29.0 – 31.8 °C, range of minimum temperature observed was 21.9 – 24.6 °C, mean relative humidity observed in morning and afternoon were 88.3 % and 78.5 % respectively. The average wind speed range was 1.4 – 9.9 km/hr.

Weather forecast for next five days of Bishnupur (8th to 12th July, 2015)

There may be heavy rain on Wednesday and light to moderate during remaining days. Sky will remain mainly cloudy to cloudy upto with maximum temp. of 25.0 – 27.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach upto 100 % (max RH) & 93 % (min RH). The average wind speed may be 0-2 km/ hr during next five days. The Wind direction may be north-easterly or easterly on 8th & 11th and south westerly to westerly during remaining days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Maturity to Harvesting stage and post-harvesting		<ul style="list-style-type: none"> - Rice can be harvested when 80% of panicles turn hard & golden yellow. - Thresh, dry properly and clean seeds well before storage.
Kharif Rice	Direct seeding/ Uprooting/ transplanting & early vegetative		<ul style="list-style-type: none"> - For Direct seeded crop: <ol style="list-style-type: none"> a. Dry seeding: It may be done in elevated fields upto June. Sow with row seeder/ seed drill. b. Wet seeding: Pre-soaked seeds may be seeded during June to July in the fields which can be kept moist (wet). The excess water should be drained out before seeding. - Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one ha area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July. - 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.
Kharif maize	Cob maturity to harvesting		<ul style="list-style-type: none"> - Weeding may be done after rain to control insect/ pest. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Flowering		<ul style="list-style-type: none"> - Maintain proper drainage system to avoid water logging. - Weeding should be done after rain to avoid hairy caterpillar.
Storage (seed)			<ul style="list-style-type: none"> - 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.
Horticulture Crops			
<ul style="list-style-type: none"> • <i>Sprays mentioned below may be done after rains only.</i> • <i>Make proper drainage to avoid water logging.</i> 			
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	<ul style="list-style-type: none"> - If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Orange/ Lemon	Vegetative		<ul style="list-style-type: none"> - 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.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthrachnose	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.



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



“Gramin Krishi Mausam Seva”

		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.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Papaya	Fruiting		- Collect the severely infested fruits and destroy. - Harvest the fruit at 1/4 th ripening stage. - Use Methyl Eugenol trap. - Spray Dimethoate @2ml/lit of water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	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.
Sheep/ Goat	Above 3 months of age	Fascioliosis/ Deworming	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	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.
Cattle / Buffalo/ Mithun	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.

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. 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 @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	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

7th July, 2015

Chandel

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Kharif maize	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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