



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4 – 30.3 °C, range of minimum temperature observed was 18.2 – 20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1 – 4.1 km/hr.

Weather forecast for next five days of Bishnupur (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 15.0 – 19.0 °C. Relative humidity may reach upto 96 % (max RH) & 57 % (min RH). The average wind speed may be 4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	- Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . - Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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



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MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

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Weather forecast for next five days of Chandel (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 17.0 – 18.0 °C. Relative humidity may reach upto 85 % (max RH) & 51 % (min RH). The average wind speed may be 4-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.

Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	

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MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

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Weather forecast for next five days of Churachandpur (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 – 29.0 °C & minimum temp. 16.0 – 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 64 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	



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MANIPUR BULLETIN

15th May, 2015

Imphal-East

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Weather forecast for next five days of Imphal- East (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 16.0 – 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 49 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Animal Sciences

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Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
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		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
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Fishery:

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	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
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	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	



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Imphal-West

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Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.

Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4 – 30.3 °C, range of minimum temperature observed was 18.2 – 20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1 – 4.1 km/hr.

Weather forecast for next five days of Senapati (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 24.0 – 27.0 °C & minimum temp. 13.0 – 16.0 °C. Relative humidity may reach upto 94 % (max RH) & 45 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
	Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.	
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4 – 30.3 °C, range of minimum temperature observed was 18.2 – 20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1 – 4.1 km/hr.

Weather forecast for next five days of Tamenglong (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 15.0 – 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 55 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4 – 30.3 °C, range of minimum temperature observed was 18.2 – 20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1 – 4.1 km/hr.

Weather forecast for next five days of Thoubal (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 – 30.0 °C & minimum temp. 15.0 – 18.0 °C. Relative humidity may reach upto 95 % (max RH) & 58 % (min RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.

Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
		nurseries	Pond and water
	Grow -out	Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
		Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
	Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.	
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.	

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



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

15th May, 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 16th to 20th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12th to 14th May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4 – 30.3 °C, range of minimum temperature observed was 18.2 – 20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1 – 4.1 km/hr.

Weather forecast for next five days of Ukhrul (16th to 20th May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 24.0 – 27.0 °C & minimum temp. 13.0 – 16.0 °C. Relative humidity may reach upto 81 % (max RH) & 43 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Drain out excess water, if accumulated due to rain in crop field. Maintain optimum water level. - Check for any insect-pest infestation in the crop.
Kharif Rice	Nursery		- Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Avoid water logging. - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
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			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.

Animal Sciences

* Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	- Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p ^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	- Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . - Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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