



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Imphal-East (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 29.0 °C & minimum temp. 16.0 – 17.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 96 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

Lakliba Yumshakeisa faoba nong chuba yai. Phou loktringei numit 10ni watlingaida eeshing kangna thadokpiyu. Maru changba nung hawai hektokpiro. Leibak hawai manana hagam-mapal machu oisanlakaga kenba hourakpa amadi maru changakanda fooktokpiba yarani.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Imphal-West (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 16.0 – 18.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 85 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

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MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Senapati (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 22.0 – 27.0 °C & minimum temp. 14.0 – 16.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 89 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

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(I. Meghachandra Singh)
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MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

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During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Tamenglong (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 25.0 – 29.0 °C & minimum temp. 15.0 – 17.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 76 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

Lakliba Yumshakeisa faoba nong chuba yai. Phou loktringei numit 10ni watlingaida eeshing kangna thadokpiyu. Maru changba nung hawai hektokpiro. Leibak hawai manana hagam-mapal machu oisanlakaga kenba hourakpa amadi maru changakanda fooktokpiba yarani.

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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Thoubal (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 28.0 °C & minimum temp. 16.0 – 17.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 93 % (minimum RH). The average wind speed may be 2 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

Lakliba Yumshakeisa faoba nong chuba yai. Phou loktringei numit 10ni watlingaida eeshing kangna thadokpiyu. Maru changba nung hawai hektokpiro. Leibak hawai manana hagam-mapal machu oisanlakaga kenba hourakpa amadi maru changakanda fooktokpiba yarani.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Ukhrul (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 26.0 – 28.0 °C & minimum temp. 14.0 – 16.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 80 % (minimum 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			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

Lakliba Yumshakeisa faoba nong chuba yai. Phou loktringei numit 10ni watlingaida eeshing kangna thadokpiyu. Maru changba nung hawai hektokpiro. Leibak hawai manana hagam-mapal machu oisanlakaga kenba hourakpa amadi maru changakanda fooktokpiba yarani.

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Bishnupur (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 29.0 °C & minimum temp. 16.0 – 17.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 86 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyrifos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

SMS:

Lakliba Yumshakeisa faoba nong chuba yai. Phou loktringei numit 10ni watlingaida eeshing kangna thadokpiyu. Maru changba nung hawai hektokpiro. Leibak hawai manana hagam-mapal machu oisanlakaga kenba hourakpa amadi maru changakanda fooktokpiba yarani.

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



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Chandel (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 17.0 – 18.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 82 % (minimum 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			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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“Integrated Agromet Advisory Services”

			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Tetanus	In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
Pig	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	- Give Tolzan-F @ 30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp/ Catfish culture	Grow – out/ nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. - Feeds should be provided 2-3 times a day @ 5-10% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water. - 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
Paddy cum fish culture	Water management		- Maintained 1.0 m water depth of the trenches in paddy field. - Provide rice bran and mustard oil cake (1:1) as supplementary feed. Avoid insecticide/pesticide application.

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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th October, 2014

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 11th to 15th October, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th October, 2014)

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 29.8 – 31.8 °C, range of minimum temperature observed was 17.0 – 17.7 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 63.0 % respectively. The average wind speed range was 0.5 – 1.0 km/hr.

Weather forecast for next five days of Churachandpur (11th to 15th October, 2014)

There may be light to moderate rains in the next few days. Sky may be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 16.0 – 18.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 85 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Kharif Rice	Grain filling to maturity & harvesting		- Water level should be maintained at 5cm level before maturity but drain it out completely 10 days before harvesting. - Sprays mentioned below may be done preferably during evening hours.
			For early sown crops, if 80 % of the spikelet have turned yellow, harvest before rains.
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water before rains.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
Soybean	Maturity to harvesting		Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed.
Groundnut	Maturity to harvesting		- Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds.
Blackgram	Flowering to fruiting	Hairy caterpillar	Weeding may be done. Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Onion	Nursery raising		- Apply Captan 50 WP after final land preparation as preventive measures against soil borne diseases. - Also check that the new sprouts are not damaged.
Carrot/ Radish/ Coriander	Sowing		Radish/ Carrot/ Coriander may be sown.
Capsicum	Nursery		This is the ideal time for nursery sowing for capsicum for early/off-season vegetable under polyhouse.
Ginger/ Turmeric	Rhizome initiation stage		- Mulch the bed with paddy straw or green leaves especially leguminous plants rich in nitrogen (e.g., leaves of early rice bean in hills) or Acalypha leaves (rich in phosphorus) @ 1-1.25 t/ Sangam after rains. - Mulching with leaves of Lantana camera is also useful for controlling shoot borer. - Pour cowdung slurry or liquid manure to ensure microbial activity and



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			nutrient availability. - Apply Trichoderma along with bio-fertilizer (Azospirillum, Azotobacter and PSB, etc.).
		Shoot borer	- Spray <i>Malathion</i> or <i>Monocrotophos</i> @ 1 ml/ lit of water at 21 days interval twice or thrice depending upon the severity of incidence.
		leaf blotch and leaf spot	- To prevent occurrence/ spreading of leaf blotch and leaf spot, spray Carbendazim + Mencozeb @ 2g/ litre of water at 7-10 days interval after rains.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or Planth growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litre cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
- Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding. - Take up measures to reduce flies and mosquitoes population in and around the birds/ animals sheds.			
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2 g/ lit of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
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