



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th and 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 29.0 °C and minimum temp. of 18.0 – 21.0 °C. Relative humidity is likely to be above 93 % upto 8th then during remaining days maximum RH is likely to attain max of 99 % and minimum RH of 81 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing.
		Case worm, borer, leaf folder, thrips	- In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Bacterial leaf blight	Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Any sucking insect	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
Soybean	Vegetative	Hairy caterpillars	Imidachloprid @ 8ml/ 15 litres of water.
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water). - Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Bishnupur (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th & 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 29.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 94 %. The average wind speed during next five days is likely to be 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.

Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.			
* Harvest rain water for future use during no rain period.			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Chandel (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th & 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 32.0 °C and minimum temp. of 20.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 94 %. The average wind speed during next five days is likely to be 2- 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolous)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

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MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Churachandpur (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th & 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 20.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 92 %. The average wind speed during next five days is likely to be 2- 5 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.

Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
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Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
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Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
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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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - East (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th and 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 30.0 °C and minimum temp. of 19.0 – 22.0 °C. Relative humidity is likely to be above 95 % upto 8th then during remaining days maximum RH is likely to attain max of 100 % and minimum RH of 84 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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



“Integrated Agromet Advisory Services”

Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - West (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th and 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 30.0 °C and minimum temp. of 20.0 – 22.0 °C. Relative humidity is likely to be above 95 % upto 8th then during remaining days maximum RH is likely to attain max of 100 % and minimum RH of 86 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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



“Integrated Agromet Advisory Services”

Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th and 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 32.0 °C and minimum temp. of 21.0 – 23.0 °C. Relative humidity is likely to be above 92 % upto 8th then during remaining days maximum RH is likely to attain max of 100 % and minimum RH of 88 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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



“Integrated Agromet Advisory Services”

Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blotch is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolous)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

I. Meghachandra Singh
Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th and 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 30.0 °C and minimum temp. of 21.0 – 22.0 °C. Relative humidity is likely to be above 91 % upto 8th then during remaining days maximum RH is likely to attain max of 100 % and minimum RH of 88 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



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



“Integrated Agromet Advisory Services”

Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

6th August, 2013

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 7th to 11th August, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 5th August, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 3rd and afternoon hours of 4th August. 103.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 26.4 – 33.4 °C, range of minimum temperature observed was 21.6 – 23.5 °C, mean relative humidity observed in morning and afternoon were 94.25 % and 75.75 % respectively. The average wind speed range was 0.5 – 2.9 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Ukhrul (7th to 11th August, 2013)</u></p> <p>It is likely to have moderate to heavy rains on 7th & 11th and light rains during 8th to 10th August. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 24.0 - 28.0 °C and minimum temp. of 14.0 – 18.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 95 %. The average wind speed during next five days is likely to be 2- 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 9th August, 2013): Rain/thundershowers would occur at most places over northeast.
Weather Outlook for subsequent 4 days from 9th to 13th August, 2013: Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<p>* Crops must be exposed to sun for at least three hours after spraying of the following insecticide and pesticides. Hence they must be applied if there is probability of no rain for at least three hours.</p> <p>* Harvest rain water for future use during no rain period.</p>			
Field Crops			
Rice	Pre-kharif Post harvest		- Seeds must be stored when dried and moisture content is nearly 12%.
	Kharif Tillering and nursery (for late variety rice)		- Weeding must be done at 25days after transplanting. Drain out the water and apply 33kg of urea as top dress. Drain in water after 48hrs of top-dressing. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
		Case worm, borer, leaf folder, thrips	Coragen @ 3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Bacterial leaf blight	Streptocycline @ 2g/15 litres of water (at least three pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
Soybean	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Groundnut	Vegetative	Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 30, 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - Inter-culture operations may be carried out. - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. - Protect nursery from damping off. - Fumigate the soil with formaldehyde drench the soil with Captan 50WP.



**ICAR Research Complex for N.E.H. Region
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“Integrated Agromet Advisory Services”

Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Ginger/ Turmeric	Vegetative		- Application of pesticides for shoot borer, leaf spot and leaf blight is very essential for seed purpose. Same sprays may also be followed with 4-5 months old crops for table purpose also.
Banana	For old orchard		- Remove unwanted suckers. - After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. - Maintain only 3 plants per pit.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
* Check regularly if there is water leakage in the sheds of birds and animals and ensure supply of clean drinking water to avoid diseases.			
Goat	Above 3 months of age	Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Enterotoxaemia	- Vaccinate against Entero-toxaemia.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		Coccidial infection	- Administer Sulpha drug (Sulpha bolus)
Cattle / Buffalo/ Mithun	Above 3 months of age	B.Q.	- Vaccinate against B.Q. @ 2ml sub-cutaneously
		Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Fascioliosis	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
Poultry	All susceptible age groups	Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
		Management	- Since the weather is humid, which is not suitable for poultry birds, regular checking of litter material must be done. Remove wet ones and replace with the dry litter material to prevent any bacterial infection. - Protect birds from rain by using polythene sheets curtains for windows.

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