



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - West (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. 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 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 86 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days. - Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

I. Meghachandra Singh  
Scientist i/c, IAAS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u>	<u>Weather forecast for next five days of Senapati (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u>
During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 24.0 - 28.0 °C and minimum temp. of 18.0 – 21.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 91 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.

**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

I. Meghachandra Singh  
Scientist i/c, IAAS



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**MANIPUR BULLETIN**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Tamenglong (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 30.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 83 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

I. Meghachandra Singh  
Scientist i/c, IAAS



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**MANIPUR BULLETIN**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Thoubal (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 29.0 °C and minimum temp. of 19.0 – 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 may reach upto max. value of 4 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
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	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



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<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
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<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
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<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
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<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Ukhrul (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 23.0 - 27.0 °C and minimum temp. of 16.0 – 20.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 91 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Bishnupur (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 30.0 °C and minimum temp. of 20.0 – 21.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 90 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days. - Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Chandel (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 25.0 - 29.0 °C and minimum temp. of 19.0 – 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 may reach upto max. value of 4 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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**

**26<sup>th</sup> July, 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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Churachandpur (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 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 88 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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**

**26<sup>th</sup> July, 2013**

**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 27<sup>th</sup> to 31<sup>st</sup> July, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (23<sup>rd</sup> to 25<sup>th</sup> July, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy. <b>10.5 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 27.7 – 31.2 °C, range of minimum temperature observed was 22.4 – 22.8 °C, mean relative humidity observed in morning and afternoon were 93.3 % and 75.7 % respectively. The average wind speed range was 1.2 – 1.4 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - East (27<sup>th</sup> to 31<sup>st</sup> July, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 30.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 92 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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**Weather Forecast for next 3 days (upto 0830 hours IST of 29<sup>th</sup> July, 2013):** Rain/thundershowers would occur at many places over northeast.

**Weather Outlook for subsequent 4 days from 29<sup>th</sup> July to 2<sup>nd</sup> August, 2013:** Rainfall would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	<b>Pre-kharif Post harvest</b>		- Harvested panicles may be stacked in bundles under roof. After drying for 10-15 days, these must be well threshed, cleaned and sundried before storage.
	<b>Kharif Transplanting to early vegetative</b>		- Transplant 2-3 seedlings per hill at a spacing of 25cm x 10cm. Maintain a thin film of water after transplanting. - Transplanted seedlings will be established in 7 days, then maintain water level of 5-8 cm. Drain out excess water. - In case of failure due to submergence, RC Maniphou 7 may be sown as nurseries.
<b>Soybean</b>	Vegetative		- 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) after rains.
<b>Groundnut</b>	Vegetative		- 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) after rains.
<b>Blackgram/ Rice bean</b>	Sowing to vegetative		- Sowing may be continued after the rains where there is no problem of water logging. - Inter-culture operations may be carried out after rains.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Cauliflower</b>	Transplanting to early vegetative	Plutella Diamond black moth	- Transplant healthy seedlings at a spacing of 45cm x 45cm after rains. - Check for infestation of Plutella Diamond black moth in young plants.
<b>Banana</b>	New Plantation		- After the rains, plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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<b>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- After the rains, repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Cucurbits</b>	Fruiting to harvesting		- Provide/ repair the staking/ support system. Also provide bedding material to the fruits to avoid contact with soil.
<b>Passion fruit</b>	Flowering to fruiting	Fruit fly	After the wet spell, spray Malathion @ 5 ml/lit of water to control fruit fly. Harvest the fruits at least 15 days after spraying. Avoid water stagnation in the field.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Goat</b>	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.
		Hemorrhagic Septicemia (H.S.)	- Vaccinate against H.S. @ 1ml subcutaneously and de-worm before vaccination.
<b>Pig</b>	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)
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age	Ecto-parasite	- Apply Butox @ 3 ml/lit of water while brushing the animals.
		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.
<b>Poultry</b>	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
			- Deworm with Piperazine Hexahydrate- @ 30 ml/100birds in 3-5 lit of water: upto 6weeks old and @ 60ml/100 birds in 5-10 lit of water: above 6weeks of age.
		Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter materials are dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.

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