



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)</u></p> <p>During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. <b>14.2 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (7<sup>th</sup> to 11<sup>th</sup> September, 2013)</u></p> <p>It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 29.0 – 32.0 °C and minimum temp. of 21.0 – 24.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 74 %. The average wind speed during next five days may be 2 km/hr.</p>
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**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)</u></p> <p>During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. <b>14.2 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (7<sup>th</sup> to 11<sup>th</sup> September, 2013)</u></p> <p>It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 31.0 °C and minimum temp. of 21.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 80 %. The average wind speed during next five days may be 0-4 km/hr.</p>
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**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)</u></p> <p>During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. <b>14.2 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (7<sup>th</sup> to 11<sup>th</sup> September, 2013)</u></p> <p>It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 24.0 – 28.0 °C and minimum temp. of 16.0 – 19.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 84 %. The average wind speed during next five days may be 2-3 km/hr.</p>
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**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
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		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)

During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. **14.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.

Weather forecast for next five days of Bishnupur (7<sup>th</sup> to 11<sup>th</sup> September, 2013)

It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. 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 76 %. The average wind speed during next five days may be 0-2 km/hr.

**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types.
		Tikka disease	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)</u></p> <p>During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. <b>14.2 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (7<sup>th</sup> to 11<sup>th</sup> September, 2013)</u></p> <p>It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 19.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 85 %. The average wind speed during next five days may be 2-4 km/hr.</p>
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**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75%WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)

During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. **14.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.

Weather forecast for next five days of Churachandpur (7<sup>th</sup> to 11<sup>th</sup> September, 2013)

It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 – 31.0 °C and minimum temp. of 19.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 82 %. The average wind speed during next five days may be 0-3 km/hr.

**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types.
		Tikka disease	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)

During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. **14.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.

Weather forecast for next five days of Imphal - East (7<sup>th</sup> to 11<sup>th</sup> September, 2013)

It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 21.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 75 %. The average wind speed during next five days may be 2 km/hr.

**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)

During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. **14.2 mm** rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.

Weather forecast for next five days of Imphal - West (7<sup>th</sup> to 11<sup>th</sup> September, 2013)

It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. 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 74 %. The average wind speed during next five days may be 2 km/hr.

**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

Rain/thundershowers would occur at many places over north-east.

**Weather Outlook for subsequent 4 days from 09th September to 13th September, 2013**

Rain/thundershowers would occur at many places over north-eastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water. Maintain water level to optimum level.
	Tillering (for late sowing)		- Weeding must be done at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Case worm, borer, leaf folder, plant hopper	- Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Any sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
<b>Soybean</b>	Flowering to pod formation	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.
		Rust	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval.
<b>Groundnut</b>	Pegging	Hairy caterpillars	- Weeding may be done. Rogue out all off-types. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 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 50 and 60 days after sowing
<b>Blackgram</b>	Sowing to vegetative	Hairy caterpillars	- Sowing may be done upto mid of September. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

Horticulture Crops			
Garden pea/ french bean	Land preparation		After harvesting of colocasia/ cucurbits, the plots may now be prepared as raised beds for sowing of pea/ French bean. - In low lying areas, drains may be constructed for draining out excess rain water.
Rabi vegetables	Nursery preparation		Raise nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.) Provide temporary rain shelter/ shed upto 5-5.5 feet facing towards east and 3-3.5 feet towards west. Bamboo chatai/ tin sheets may be used for it. Such arrangement will be helpful for good sunlight and also to drain excess water. Prepare land for transplanting cole crops.
Citrus	Seed collection and sowing/ stem cutting		Collect healthy/ disease free good yield variety citrus. After taking out seeds from fruit wash it properly and dry under shed for 2-3 days. Collected seeds may be sown or stored as preferred. Also, 15-20 cm long stem may be collected from mature terminal growth for cutting. These cuttings may be planted 20 cm apart in rows and 30cm between the rows
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 2.5ml orally/ 50kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Piperazine liq. @ 15 ml orally/ adult once.
		Ectoparasites	- Spraying Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite (Hypoderma Warbles)	- Spraying Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Deworm with Piperazine Hexahydrate @ 50ml/100 birds and accompany Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Poultry must be provided Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manure pond at 30 days interval. If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh  
Sp Scientist i/c, IAAS



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**6<sup>th</sup> September, 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 7<sup>th</sup> to 11<sup>th</sup> September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (3<sup>rd</sup> to 5<sup>th</sup> September, 2013)</u></p> <p>During the past three days the sky was cloudy but mainly cloudy during afternoon hours of 4<sup>th</sup> September. <b>14.2 mm</b> rainfall was recorded during past three days. Maximum temperature range observed was 25.2 – 30.6 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 88.3 % respectively. The average wind speed range was 0.7 – 1.2 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (7<sup>th</sup> to 11<sup>th</sup> September, 2013)</u></p> <p>It is likely to have moderate rains on 8<sup>th</sup> and 9<sup>th</sup> but light rains on 7<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> September. 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. The maximum RH is likely to attain max of 100 % and minimum RH of 72 %. The average wind speed during next five days may be 2 km/hr.</p>
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**Main Weather Observations**

**Kalpana- 1:** Cloud imagery at 0530 hours IST shows convective clouds over some parts of northeastern states

**Weather Forecast for next 3 days (upto 0830 hours IST of 9th September, 2013)**

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