



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 30.0 - 33.0 °C and minimum temp. of 22.0 – 24.0 °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 be 2-4 km/hr.</p>
---	--

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
<i>Field Crops</i>			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<i>Horticulture Crops</i>			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. 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 95 %. The average wind speed during next five days may be 2-4 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate 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 16.0 – 20.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 93 %. The average wind speed during next five days may be 3-4 km/hr.</p>
---	--

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 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 95 %. The average wind speed during next five days may be 2-4 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 29.0 - 33.0 °C and minimum temp. of 22.0 – 24.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 96 %. The average wind speed during next five days may be 3-5 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th to 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 32.0 °C and minimum temp. of 21.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 95 %. The average wind speed during next five days may be 2-6 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 32.0 °C and minimum temp. of 21.0 – 23.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 91 %. The average wind speed during next five days may be 0-3 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th to 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. 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 – 24.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 93 %. The average wind speed during next five days may be 2-4 km/hr.</p>
---	---

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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
 Spcientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

3rd 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 4th 8th September, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (30th August to 2nd September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 1st September. 1.6 mm rainfall was recorded during past four days. Maximum temperature range observed was 28.5 – 32.3 °C, range of minimum temperature observed was 22.5 – 23.2 °C, mean relative humidity observed in morning and afternoon were 92.75 % and 73.75 % respectively. The average wind speed range was 2.9 – 5.5 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (4th to 8th September, 2013)</u></p> <p>It is likely to have light to moderate 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 19.0 – 22.0 °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 be 2-3 km/hr.</p>
---	--

Weather Forecast for next 3 days (upto 0830 hours IST of 6th September, 2013)

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

Weather Outlook for subsequent 4 days from 6th to 10th 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
Field Crops			
Rice	Panicle Initiation (for normal sowing)		- Weed out then top dress after 45 days of transplanting with 33 Kg Urea/ ha after draining out water.
	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.
Soybean	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.
Groundnut	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 7.6 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Monitor for infestation of Tikka disease. If observed, spray Mancozeb @ 2.6g + Carbendazim @ 1g/litre water at 50 and 60 days after sowing
Blackgram/ Rice bean	Sowing to vegetative	Hairy caterpillars	- Sowing may be continued where there is no problem of water logging. - For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water).
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Rabi vegetables	Nursery preparation		Prepare for raising nurseries of rabi vegetables (cabbage/ cauliflower/ broccoli, etc.)



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



“Integrated Agromet Advisory Services”

			<p>- 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.</p> <p>Also, procure good quality seeds of garden pea and French bean from reliable source.</p>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Select foothills/ hill slope areas for establishment of new orchards.</p> <p>For planting, make pit size of 1x1x1 foot.</p>
Citrus	Seed collection and sowing/ stem cutting		<p>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.</p> <p>Collected seeds may be sown or stored as preferred.</p> <p>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</p>

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Goat	Above 3 months of age	Deworming	- Administer Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Tick	- Use Ex-tick @ 3ml/ lit of water while brushing the animals.
Pig	Above 3 months of age	Helminth parasite	- Administer Minthal bolus 200mg, 1 bolus per 40 kg b. wt. once. Accompany with a vitamin like Livozyme @ 50ml twice daily.
		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.
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