



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Imphal-West**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Imphal-West (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 21.0 – 22.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 97 % (minimum RH). The average wind speed may be 0-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Senapati**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Senapati (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 18.0 – 20.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 95 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Tamenglong (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 95 % (minimum RH). The average wind speed may be 0-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Thoubal**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

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Weather forecast for next five days of Thoubal (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 30.0 – 31.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 99 % (minimum RH). The average wind speed may be 0-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



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<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Ukhrul**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Ukhrul (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 27.0 – 30.0 °C & minimum temp. 18.0 – 19.0 °C. Relative humidity may reach a maximum of 99 % (maximum RH) & 91 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Bishnupur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Bishnupur (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 21.0 – 22.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 98 % (minimum RH). The average wind speed may be 0-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Chandel**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Chandel (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 31.0 – 33.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 94 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Tamenglong (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 21.0 – 22.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 97 % (minimum RH). The average wind speed may be 0-2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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



**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Black Quarter	- B.Q. vaccination may be carried out to control occurrence of Black Quarter disease during cold season (Nov. & Dec.)
		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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

**\* Encircle the ponds with nylon/plastic nets in order to prevent escape of fish.**

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**26<sup>th</sup> August, 2014**

**Imphal-East**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 27<sup>th</sup> to 31<sup>st</sup> August, 2014 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 25<sup>th</sup> August, 2014)

During past four days sky was partly cloudy to mainly cloudy but cloudy during morning hours of 22<sup>nd</sup> August. **128.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 29.4 – 31.2 °C, range of minimum temperature observed was 21.9 – 22.5 °C, mean relative humidity observed in morning and afternoon were 91.5 % and 77.5 % respectively. The average wind speed range was 0.2 – 0.9 km/hr.

Weather forecast for next five days of Imphal-East (27<sup>th</sup> to 31<sup>st</sup> August, 2014)

There may be light to moderate rain upto Thursday then moderate to heavy rains upto Sunday. Sky may be partly cloudy to cloudy with maximum temp. of 30.0 – 32.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach a maximum of 100 % (maximum RH) & 99 % (minimum RH). The average wind speed may be 0-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Interculture operations/ weeding, application of fertilizer and spray of insecticides/ pesticides may be done before rains.</b>			
<b>Field Crops</b>			
<b>Kharif Rice</b>	Tillering to panicle initiation		- Ridges may be well constructed to maintain optimum water level of 5-8cm. Drain out excess water. - Weeding may be done before top dressing. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder, plant hopper or thrips	Spray Coragen @ 3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
<b>Soybean</b>	Flowering to fruiting and pod formation	- Rust - Hairy caterpillar	- Spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval. - Spray Chloropyriphos 20 EC @ 2.5 ml/ lit of water. - Drain out excess water from the crop area.
<b>Groundnut</b>	Pod formation		- Hand weeding should be done to prevent hairy caterpillar and other insect pest. - Drain out excess water from the crop area.
		Tikka disease	- Spray Carbendazim @ 0.5g / 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. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Ginger</b>	Rhizome initiation	Rhizome rot/ soft rot	- If yellowing of leaves and water soaked appearance at the pseudostem, apply Trichoderma harzianum @ 5-10gm/ litre water to drench the soil or Redomil MZ-72 WP @ 2g/litre of water.
		Shoot Borer	- If larval infestation is observed in shoots then spray Malathion (0.1%) at monthly interval. Pruning of freshly infested shoots may also be done at 15 days interval.
<b>Cabbage/ Cauliflower/ Broccoli</b>	Nursery raising		- Drain out excess water accumulated near the nursery beds to avoid water logging. Provide moveable/ temporary sheds to protect from rain. - Farmers having polyhouses may raise nurseries of cole crops. Prophylactic and curative measures such as soil fumigation/ soil sterilization against damping off should be strictly followed with either Captan or Sixer.



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**“Integrated Agromet Advisory Services”**

<b>Turmeric</b>	Rhizome initiation	Taphrine leaf blotch and other leaf spot	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. - Avoid water logging. Drain out excess water from the field.
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**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Provide clean drinking water to birds and animals. Avoid water logging around the sheds as it may help in mosquito breeding.</b>			
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	Vaccinate against Ranikhet disease.
		Fowl pox	- Vaccinate against fowl pox. If already infected, paint with Iodine tincture or Betadine liquid daily on pox growth.
		Management	Add Furazolidone @ 100g in 100 kg of feed for one week. Keep litter material dry and add lime powder (deactivated) @ 3-4 kg per 100sq. ft.
		Parasites (external)	Spray Butox liquid @ 2 ml/ lit of water twice a week.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Enterotoxaemia	Enterotoxaemia vaccination if available (M.C.C.V.) at 5 cc sub-cutaneously.
		Ectoparasites	Brush the animal using medicated solution (Butox liquid @ 2 ml/ lit of water) twice a week.
<b>Pig</b>	Above 3 months of age (as and when required)	Coccidial infection (Diarrhea)	Ofloxacin tab twice daily for 5 days.
		Deworming	- Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
			Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
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		Tick	Add Butox @ 2cc/ lit of water and bath animal using the solution at fortnight interval.
		Amphistomiasis	- Tolzan-F @ 30 ml/ 100kg body weight.

**Fishery:**

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