



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Senapati (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 20.0 - 23.0 °C & minimum temp. 2.0 – 4.0 °C. Relative Humidity may reach a maximum value of 99 % (maximum RH) & 41 % (minimum RH). The average wind speed may be 2-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

I. Meghachandra Singh  
Scientist i/c,  
Gramin Krishi Mausam Seva (GKMS)



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Tamenglong (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 22.0 - 25.0 °C & minimum temp. 4.0 – 6.0 °C. Relative Humidity may reach a maximum value of 97 % (maximum RH) & 39 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

I. Meghachandra Singh  
Scientist i/c,  
Gramin Krishi Mausam Seva (GKMS)



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Thoubal (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 22.0 - 25.0 °C & minimum temp. 4.0 – 6.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 47 % (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>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

I. Meghachandra Singh  
Scientist i/c,  
Gramin Krishi Mausam Seva (GKMS)





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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Ukhrul (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 21.0 - 23.0 °C & minimum temp. 3.0 – 4.0 °C. Relative Humidity may reach a maximum value of 95 % (maximum RH) & 46 % (minimum RH). The average wind speed may be 3-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

I. Meghachandra Singh  
Scientist i/c,  
Gramin Krishi Mausam Seva (GKMS)





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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

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During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Bishnupur (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 23.0 - 25.0 °C & minimum temp. 5.0 – 6.0 °C. Relative Humidity may reach a maximum value of 99 % (maximum RH) & 44 % (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>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Chandel (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 21.0 - 24.0 °C & minimum temp. 3.0 – 5.0 °C. Relative Humidity may reach a maximum value of 97 % (maximum RH) & 50 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

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

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Churachandpur (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 23.0 - 25.0 °C & minimum temp. 3.0 – 5.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 39 % (minimum RH). The average wind speed may be 4-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Imphal - East (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 22.0 - 24.0 °C & minimum temp. 4.0 – 5.0 °C. Relative Humidity may reach a maximum value of 100 % (maximum RH) & 41 % (minimum RH). The average wind speed may be 0-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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



**“Integrated Agromet Advisory Services”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**13<sup>th</sup> December, 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 14<sup>th</sup> to 18<sup>th</sup> December, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (10<sup>th</sup> to 12<sup>th</sup> December, 2013)

During the past three days the sky was clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 23.2 – 23.3 °C, range of minimum temperature observed was 5.0 – 8.1 °C, mean relative humidity observed in morning and afternoon were 87.3 % and 52.7 % respectively. The average wind speed range was 1.4 – 1.9 km/hr.

Weather forecast for next five days of Imphal - West (14<sup>th</sup> to 18<sup>th</sup> December, 2013)

There may be no rain upto Wednesday. Sky may be clear with maximum temp. of 21.0 - 23.0 °C & minimum temp. 4.0 – 6.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 39 % (minimum RH). The average wind speed may be 2-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Post-harvest		- Dry grains/ seeds to 12-14% moisture if mechanical thresher is used.
<b>Rapeseed/ Mustard</b>	Vegetative		- Apply foliar application of urea {5 pumps per sangam @ 10g/pump}. - If irrigation facility is available, give light irrigation just to keep soil moist during vegetative stage.
<b>Pulses</b>	Vegetative		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
<b>Rabi Maize</b>	Land preparation to sowing		- Rabi maize may be sown as intercrop with potato or pulses. 60cm width 40cm high ridges along east-west may be prepared after ploughing. Southern face may be sown with maize and northern with pea seeds.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
<b>Horticulture Crops</b>			
<b>Broad bean</b>	Sowing		- Broad bean may be sown. Avoid sowing in damped and shed area as the crops are prone to fungal disease.
<b>Tree Bean</b>	Pre-bearing and bearing plants		- Spray Thiomethoxam @ 5g/15 lit of water against stem borer.
<b>Cauliflower</b>	Curd initiation stage		- If <i>Whip tail</i> is observed in cauliflower, spray Borax @ 3g/ lit of water or spray Tracel (micronutrient @ 5 g/ lit of water) in addition to recommended dose of fertilizer. - At this stage 4 kg DAP + 4 kg K <sub>2</sub> O for 2000 plants may be applied.
<b>Onion/ Garlic</b>	Transplanting to vegetative		- Give light watering during morning and evening hours till plants are established.
	For late sowing of onion		- Direct seeded followed by thinning of nursery may be done for onion (at a spacing of 10 cm plant to plant & 20 cm row to row) - For an area of 10 m <sup>2</sup> , 1500 seedlings are required.
<b>Cabbage/ Broccoli</b>	For ratoon/ sprouts (in early sown crops)		- In large scale farms, farmers are advised to top dress 3g DAP/ plant for good yield.
	Nursery		- If yellowing of leaves of mature seedlings is observed, spray Carbendazim @ 1g/ lit of water. - Transplanting may be completed at earliest possible.
<b>Garden pea</b>	Vegetative		- Give light irrigation just to keep soil moist. - Avoid plucking of young shoots.

\* Smoking is advised in and around the crop field during morning and evening hours.

\* Apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.



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

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	- Amprolium powder may be added in low dose in both feed (@25 g per 1000kg of mash) and drinking water (30g 25 lit of water) of poultry above 3 weeks of age.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days. 2. R <sub>2</sub> B vaccine at 8-9 weeks of age and 3. Killed ND virus vaccine at 16-18 weeks of age.
		Management	- Increase energy feed upto 5% (like maize, rice bran, etc.). - Add antibiotic, Hostacycline/ Duaprin @ 2 g/ lit of drinking water for 7 days along with vitamin B & vitamin A. - protect birds from cold by hanging plastic sheet all around the wire mesh/ poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Deworming	- Administer Banif Bolus orally @ 1 bolus/ 100 kg b. wt.
		Ectoparasite	Spray Butox @ 2ml in 1 lit of water for protection against mange and mites.
			- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied with Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- For milch cow, administer 100 ml Osteovet liq. daily.
			- Himax ointment may be applied on the affected area/ wounds caused due to bites of warble flies.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	- If the pond water quality is not good then change it with fresh and clear water. Maintained water depth of 1.0-1.5m. - If the water level in pond is decreasing then culture pond area may be reduced and stocking density may be maintained.
		Feeding	- Minimum feed must be provided in two splits @ 1-2 % of body weight per day.
			- Check fish health from time to time by netting.

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