



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

13th January, 2015

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 14th to 18th January, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Senapati (14th to 18th January, 2015)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 - 20.0 °C & minimum temp. 0.0 -3.0 °C. Relative humidity may reach upto 98 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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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	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	<ul style="list-style-type: none">- Stock fish for next season and for this practices mentioned below may be done in small scale.- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.- Feeds should be provided 1-2 times a day @ 2-3% body weight per day.- Well balanced feed fortified with vitamins and minerals should be provided.- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

13th January, 2015

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 14th to 18th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Tamenglong (14th to 18th January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 – 21.0 °C & minimum temp. 0.0 – 3.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 3-5 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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MANIPUR BULLETIN

13th January, 2015

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 14th to 18th January, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Thoubal (14th to 18th January, 2015)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 22.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 38 % (minimum RH). The average wind speed may be 2 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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



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MANIPUR BULLETIN

13th January, 2015

Ukhrul

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During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Ukhrul (14th to 18th January, 2015)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 19.0 - 20.0 °C & minimum temp. 1.0 - 3.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.



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Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
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Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	<ul style="list-style-type: none">- Stock fish for next season and for this practices mentioned below may be done in small scale.- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m.- Feeds should be provided 1-2 times a day @ 2-3% body weight per day.- Well balanced feed fortified with vitamins and minerals should be provided.- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

13th January, 2015

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 14th to 18th January, 2015 as below:

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Weather Warning during next 3 days *

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Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
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		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

(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

13th January, 2015

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 14th to 18th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Chandel (14th to 18th January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 22.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 41 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

13th January, 2015

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 14th to 18th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Churachandpur (14th to 18th January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 22.0 °C & minimum temp. 3.0 - 5.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 3-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

(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

13th January, 2015

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 14th to 18th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Imphal-East (14th to 18th January, 2014)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 24.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 34 % (minimum RH). The average wind speed may be 2-3 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.
Fishery:			
Type of Farming	Stage & Management	Agro-metrological advisories	
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.	

(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

13th January, 2015

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 14th to 18th January, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (9th to 12th January, 2015)

During past four days sky was mainly cloudy to cloudy upto 10th Jan morning then clear to mainly clear. **8.5 mm** rainfall was recorded during past four days. Maximum temperature range observed was 13.6 – 21.9 °C, range of minimum temperature observed was 3.5 – 9.9 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 61.5 % respectively. The average wind speed range was 1.0 – 2.3 km/hr.

Weather forecast for next five days of Imphal-West (14th to 18th January, 2015)

There may be light rain on Saturday. Sky will be mainly clear to partly cloudy with maximum temp. of 21.0 – 22.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 96 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 2-4 km/ hr during next five days.

Weather Forecast for next 3 days * 0830 hours IST of 16th January, 2015

Fog would occur at few places over Manipur.

Weather Warning during next 3 days *

Fog would occur at isolated places over Manipur on 13th and 14th January, 2015.

Weather Outlook for subsequent 4 days from 16th January 2015 to 20th January 2015

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

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rapeseed/ mustard	Flowering to pod formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. Do not irrigate as there is likely of rain on Saturday.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Downy Mildew	Spray Zineb 80 WP @ 0.2% @ 2kg / 1000 lt. / ha at 10 days interval as soon as the symptoms start appearing on the plants for Downy Mildew.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only.
Pulses (Field pea/ Lentil)	Vegetative to flowering	Aphid	- Spray Cypermethrin @2ml/lit of water against aphid on the infected patches only. - For organic control against aphid, sprays that consist of Azadirachtin, Neem oil or Pyrethrin may be used.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Potato	Vegetative		Earthing up may be done when the plant is 15cm high (or 35days old).
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
Storage			- Clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Tomato	Sowing		- Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag.



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



“Integrated Agromet Advisory Services”

Local cucumber (Kalenthabi)	Land preparation to sowing		- Land preparation for sowing of local cucumber (kalen thabi) may be started.
Ginger/ Turmeric	Harvesting to storage		For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20 cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Coccidiosis	Give Coximar @ 2g/lit of drinking water for 5-7 days.
		Ranikhet disease	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers).
		Management	- Mix deactivated lime powder @ 2 kg per 100 sq. ft. area in litter material to prevent from caking. - 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 A, vitamin B & vitamin C.
Sheep/ Goat	Above 3 months of age (as and when required)	Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra-dermally.
		Ectoparasite	Use Butox liq. @ 2ml/ 4 litres of water and wash the animal with the solution.
Pig	Above 3 months of age (as and when required)	Swine Fever	- Vaccinate against swine fever after the age of 3 months.
		Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Deworming	- Deworm 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.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Deworming	Deworm using TolzanF @ 100ml/300kg body weight.
		F.M.D.	- Vaccinate against F.M.D.
		Ticks/ Wounds	Topicure spray may be used twice daily on the affected parts.

Fishery:

Type of Farming	Stage & Management	Agro-metrological advisories
Carp/ Catfish culture	Stock maintenance	- Stock fish for next season and for this practices mentioned below may be done in small scale. - Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5 m. - Feeds should be provided 1-2 times a day @ 2-3% body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.

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