



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Churachandpur (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 26.0 °C & minimum temp. 4.0 – 6.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 42 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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“Integrated Agromet Advisory Services”

Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Imphal-East (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 26.0 °C & minimum temp. 2.0 – 4.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 38 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Imphal-West (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 26.0 °C & minimum temp. 3.0 – 6.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 36 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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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MANIPUR BULLETIN

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Senapati (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 – 24.0 °C & minimum temp. 2.0 – 4.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 35 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Storage			- Dry, 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			
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.
Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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.



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“Integrated Agromet Advisory Services”

			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

20th 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 21st to 25th January, 2014 as below:

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Weather forecast for next five days of Tamenglong (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 25.0 °C & minimum temp. 3.0 – 5.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 37 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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



“Integrated Agromet Advisory Services”

Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Thoubal (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 27.0 °C & minimum temp. 2.0 – 4.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 48 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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

20th January, 2015

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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Ukhrul (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 20.0 – 23.0 °C & minimum temp. 2.0 – 4.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 43 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
Storage			- Dry, 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			
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.
Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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.



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			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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Bishnupur (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 24.0 – 26.0 °C & minimum temp. 4.0 – 5.0 °C. Relative humidity may reach upto 98 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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



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Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

20th 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 21st to 25th January, 2014 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th January, 2015)

During past four days sky was mainly clear to partly cloudy but mainly cloudy to cloudy from afternoon hours of 17th to morning of 18th Jan. **19.6 mm** rainfall was recorded during past four days. Maximum temperature range observed was 19.5 – 24.4 °C, range of minimum temperature observed was 5.5 – 11.1 °C, mean relative humidity observed in morning and afternoon were 89.3 % and 51.0 % respectively. The average wind speed range was 0.8 – 1.7 km/hr.

Weather forecast for next five days of Chandel (21st to 25th January, 2014)

There may be no rain upto Sunday. Sky will be mainly clear to partly cloudy with maximum temp. of 23.0 – 24.0 °C & minimum temp. 2.0 – 4.0 °C. Relative humidity may reach upto 97 % (maximum RH) & 51 % (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
Field Crops			
Rapeseed/ mustard	Flowering to siliqua formation		Top-dress with 32.5 kg Urea/ ha at 60 days after sowing. - During flowering four bee boxes may be kept in one hectare crop area. Avoid spray of insecticides in such area.
		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 Triademefon (Bayleton) 50 WP @ 10g/15litres of water (2-3 sprays) at 15 days interval as soon as the symptoms start appearing on the plants.
		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.
		Powdery Mildew	- Spray Bayleton (Triademefon 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 35- 40 days 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.
Rice	Sowing of winter rice		Sowing of winter rice may be started near lakes.
Storage			- Dry, 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			
Cucurbits	Sowing		- Continue raising of cucurbits like bitter gourd, bottle gourd, cucumber, sponge gourd, etc. in poly pouch under low cost polyhouse.
	Transplanting		- Transplant already raised 4-leaf stage seedlings raised under low cost polyhouse. - Light watering in the morning hours may be done
Onion	Vegetative		30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ ha depending upon the fertility.



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



“Integrated Agromet Advisory Services”

Vegetable crops	Land preparation	Pre-mature wilting	To avoid pre-mature wilting, soil must be well exposed to sun after ploughing. As prophylactic measure, a dormant spray of Bordeaux mixture (1:1:100) using 100 litres of water / sangam at least once in this week and another after 20-25 days. - Treat seed with Carbendazim @ 2-3g/ kg seed.
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
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