

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019*District: Churachandpur***Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Churachandpur (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear afternoon sky during next five days with max. temp. 25 °C & mini. temp. 3 °C. Relative humidity may reach upto 88 % (max) and 31 % (min). The average wind speed may be 4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Imphal East****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Imphal East (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 24-26 °C & mini. temp. 3 - 4 °C. Relative humidity may reach upto 95 % (max) and 29 % (min). The average wind speed may be 2-4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Imphal West****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Imphal West (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25-26 °C & mini. temp. 4 °C. Relative humidity may reach upto 95 % (max) and 32 % (min). The average wind speed may be 2-4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019*District: Senapati***Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Senapati (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear afternoon sky during next five days with max. temp. 22-23 °C & mini. temp. 2-3 °C. Relative humidity may reach upto 92 % (max) and 32 % (min). The average wind speed may be 4-5 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Tamenglong****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Tamenglong (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear afternoon sky during next five days with max. temp. 22-23 °C & mini. temp. 2 - 3 °C. Relative humidity may reach upto 92 % (max) and 31 % (min). The average wind speed may be 4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Thoubal****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Thoubal (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25 °C & mini. temp. 3 °C. Relative humidity may reach upto 85 % (max) and 33 % (min). The average wind speed may be 2-4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019*District: Ukhrul***Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Ukhrul (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear afternoon sky during next five days with max. temp. 22-23 °C & mini. temp. 2-3 °C. Relative humidity may reach upto 95 % (max) and 33 % (min). The average wind speed may be 4-5 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Bishnupur****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Bishnupur (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25 °C & mini. temp. 3 °C. Relative humidity may reach upto 85 % (max) and 33 % (min). The average wind speed may be 2-4 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th January, 2019**District: Chandel****Significant past weather for the preceding bi-weekly of Imphal West (15th to 17th January, 19)**

No rainfall was observed during the past three days. The skies remained clear but foggy during morning hours of 17th Jan. Maximum temperature ranged from 24.0 – 24.5 °C and minimum of 3.5 – 4.6 °C. Mean relative humidity of 91 % max and 34 % min was recorded in the past three days & average wind speed was 1.4 – 2.8 km/ hr.

Weather forecast for Chandel (19th to 23rd January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours at isolated places and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25 °C & mini. temp. 3 °C. Relative humidity may reach upto 86 % (max) and 38 % (min). The average wind speed may be 4-5 km/hr.

General Advisories:

* If the soil is dry, give light irrigation in the crop field to keep soil moist for better growth.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rapeseed/ Mustard	Vegetative to early flowering		- If flowering has started, then four bee boxes (colonies) may be kept for 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. For organic control against aphid, sprays that consist of Azadirachtin or neem oil may be used.
		Powdery mildew and white rust	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or <i>Trichoderma harzianum</i> .
Field pea/ Lentil	Vegetative to early flowering	Powdery mildew and rust	- Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) against rust.
		Downey Mildew	Apply Mancozeb 75%WP @ 1.25 -2 kg/ ha at 7-10 days interval.
Potato	Vegetative to tuber initiation	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.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. - Avoid fungal growth and pest rodent in store.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cole crops	Vegetative to head formation	Diamond Black Moth	- Spray Spinosad 2.5% SC @ 6-7 ml/ 5 litre water.
		Cabbage Borer	- Apply Carbaryl 50% WP formulation @ 1.6ml/ 5 litre water.
Tomato	Vegetative	Early blight	- Apply Dichlorvos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.
Garden pea/ Broad bean	Flowering to fruiting	Powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Banana		Fruit rot and leaf spot	- Spray Hexaconazole 5% EC @ 1ml/ litre of water.
Tree-Bean	Pre-bearing and bearing trees	bark borer/ termites	- 20g Carbofuran 3G/ plant may be in-corporated in soil as prophylactic measure against bark borer/ termites.
Onion	Vegetative		- 30 to 45 days old transplanted onion should be top dressed with 20-25 kg urea/ sangam depending upon the fertility.
Cucurbits	Nursery		- Nurseries of bitter gourd, cucumber, sponge gourd, bottle gourd, pumpkin, water melon, etc. may be raised under polyhouse.

Animal Sciences

* Arrange for external heat source during night and early morning hours.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Care and Management	Protect animals/ birds from sudden drop in temperature. Walls of sheds should be covered with polythene sheets/hessian cloths during the night. Use electric bulb or charcoal at night time to keep rooms warm in poultry shed. Litters should be of 4.5 inches thick and stir it at regular interval.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
Sheep/ Goat	All age groups	Contagious Caprine Pluero-pneumonia (CCPP)	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally.
Pig	All age groups except the young ones	Deworming	Albendazole Plus Avermectin Table 6 mg/adult.
		Coccidial infection	Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Skin diseases	Protect from skin disease by using Deltamethrin solution @2ml/litre water and bath with the solution.
Cattle	All age groups excepts the young ones	Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole) in lower altitude.
		Care and Management	Sheds must be kept dry. Use bedding materials.