

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019*District: Imphal West***Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Imphal West (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25-26 °C & mini. temp. 4-6 °C. Relative humidity may reach upto 90 % (max) and 31 % (min). The average wind speed may be 4-6 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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019*District: Senapati***Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Senapati (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 22-24 °C & mini. temp. 2-4 °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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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.

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.

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019**District: Tamenglong****Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Tamenglong (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 22-23 °C & mini. temp. 2-4 °C. Relative humidity may reach upto 91 % (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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019**District: Thoubal****Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Thoubal (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 26 °C & mini. temp. 4-5 °C. Relative humidity may reach upto 91 % (max) and 36 % (min). The average wind speed may be 3-4 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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019*District: Ukhrul***Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Ukhrul (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 22-23 °C & mini. temp. 2-4 °C. Relative humidity may reach upto 89 % (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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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.

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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019**District: Bishnupur****Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Bishnupur (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 26 °C & mini. temp. 4-6 °C. Relative humidity may reach upto 91 % (max) and 30 % (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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019**District: Chandel****Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Chandel (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 26-27 °C & mini. temp. 4-6 °C. Relative humidity may reach upto 92 % (max) and 34 % (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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019*District: Churachandpur***Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Churachandpur (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 26 °C & mini. temp. 4-6 °C. Relative humidity may reach upto 91 % (max) and 29 % (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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Seeds storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 22nd January, 2019*District: Imphal East***Significant past weather for the preceding bi-weekly of Imphal West (18th to 21st January, 19)**

No rainfall was observed during the past four days. The skies remained clear but foggy at foothills. Maximum temperature ranged from 23.5 – 24.5 °C and minimum of 2.9 – 4.4 °C. Mean relative humidity of 91 % max and 33 % min was recorded in the past four days & average wind speed was 1.7 – 1.9 km/ hr.

Weather forecast for Imphal East (23rd to 27th January, 2019)

Likely to have no rains and shallow to moderate fog during morning hours and mainly clear to partly cloudy afternoon sky during next five days with max. temp. 25-26 °C & mini. temp. 4-5 °C. Relative humidity may reach upto 90 % (max) and 29 % (min). The average wind speed may be 5-6 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	Flowering to fruiting		- If flowering has started, then four bee boxes (colonies) may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		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	Flowering to fruiting	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	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.
			- If aphid is observed in small patches, wash off it with plain water but if it is severe, spray Cypermethrin 20 EC @ 1ml/ litre of water.
Pre-kharif rice	Seed collection to nursery raising		- Procure quality and healthy seeds for nursery raising pre-kharif rice. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
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.
Mango	Flowering		- To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. To protect from Mango fruit fly, Methyl Eugenol trap 0.1% may be used @ 10 traps per hectare. Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
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 (@ 1 drop/ 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.

(I. Meghachandra Singh)
Nodal Officer, GKMS