

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Thoubal

Past weather for the of Imphal West (15th to 17th October, 2019):

6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr.

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

Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 97 % (max) & 67 % (min). The average wind speed may be 3-6 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|---------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before |



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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

| Animal Sciences | | | |
|--------------------------------|---|----------------------------|--|
| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @20-30ml for 100 kg body weight. |
| | | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| Goat | All age groups except three months or below | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

| Fishery: | | | |
|---------------------|----------|------|---|
| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Ukhrul

Past weather for the of Imphal West (15th to 17th October, 2019):

6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr.

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

Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 27-28 °C & mini. temp. 15-16 °C. Relative humidity may reach upto 95 % (max) & 52 % (min). The average wind speed may be 4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|-----------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | <ul style="list-style-type: none"> - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | <ul style="list-style-type: none"> - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | <ul style="list-style-type: none"> - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | <ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | <ul style="list-style-type: none"> - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose |



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| | | | is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

Animal Sciences

| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
|--------------------------------|---|---------------------|---|
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. |
| | | | Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

Fishery:

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| Carp culture | Grow-out | Fish | <ul style="list-style-type: none"> - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Bishnupur

Past weather for the of Imphal West (15th to 17th October, 2019):

6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr.

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

Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 98 % (max) & 58 % (min). The average wind speed may be 2-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|---------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before |



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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

| Animal Sciences | | | |
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| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
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| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
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| Fishery: | | | |
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| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Chandel

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

Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 95 % (max) & 60 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
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Animal Sciences

| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
|--------------------------------|---|---------------------|--|
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | | |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

Fishery:

| | | | |
|---------------------|----------|------|---|
| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Churachandpur

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| Past weather for the of Imphal West (15th to 17th October, 2019): 6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17 th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr. | Weather forecast for Churachandpur (19th to 23rd October, 2019): Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 98 % (max) & 57 % (min). The average wind speed may be 3-4 km/hr. |
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General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|---------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before |



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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

Animal Sciences

| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
|--------------------------------|---|---------------------|--|
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| | | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

Fishery:

| | | | |
|---------------------|----------|------|---|
| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Imphal East

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| Past weather for the of Imphal West (15th to 17th October, 2019): 6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17 th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr. | Weather forecast for Imphal East (19th to 23rd October, 2019): Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 95 % (max) & 54 % (min). The average wind speed may be 5 km/hr. |
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General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|---------------------------|--------------------------------------|--------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before |



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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

| Animal Sciences | | | |
|--------------------------------|---|----------------------------|--|
| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| | | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

| Fishery: | | | |
|---------------------|----------|------|---|
| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Imphal West

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| Past weather for the of Imphal West (15th to 17th October, 2019): 6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17 th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr. | Weather forecast for Imphal West (19th to 23rd October, 2019): Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 29-30 °C & mini. temp. 17-18 °C. Relative humidity may reach upto 91 % (max) & 51 % (min). The average wind speed may be 4 km/hr. |
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General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|---------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before |



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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

Animal Sciences

| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
|--------------------------------|---|---------------------|--|
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | | |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

Fishery:

| | | | |
|---------------------|----------|------|---|
| Carp culture | Grow-out | Fish | - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Senapati

Past weather for the of Imphal West (15th to 17th October, 2019):

6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr.

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

Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-27 °C & mini. temp. 14-15 °C. Relative humidity may reach upto 98 % (max) & 58 % (min). The average wind speed may be 4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|-----------------------------|--------------------------------------|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | <ul style="list-style-type: none"> - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | <ul style="list-style-type: none"> - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | <ul style="list-style-type: none"> - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | <ul style="list-style-type: none"> - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Tree bean | Trees above 7yrs age/ Bearing plants | | Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
| Spinach beet (Palak) | Land preparation & sowing | | <ul style="list-style-type: none"> - Well drained soil is best for growing spinach beet. - Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. - Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose |



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| | | | is required. |
| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
| Broad bean/ Pea/ French bean | Land preparation/ seed collection to sowing | | Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. |
| Mango | Appearance of new flush in bearing trees | | At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water. |

Animal Sciences

| Name of bird/ animal | Stage | Disease/ Management | Agro-meteorological advisories |
|--------------------------------|---|---------------------|---|
| Poultry (Chicken/ Duck) | All susceptible age groups | Coccidiosis | Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose. |
| | | Deworming | Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days. |
| Pig | Above 3 months of age | Deworming | Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight. |
| | | Ecto-parasite | Use Butox liquid @ 2 ml/ lit of water twice a week while brushing the animal. |
| | | Management | - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds. |
| Cattle | Above 3 months of age | Vaccination | Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | Tick | Use Butox liquid @ 2ml/ litre water twice a week while brushing animals. |
| | | | Calves should not be allowed to drink milk from mothers if affected by FMD, it affects heart and cause even death of the calves. |
| | | Deworming | De-worm with Nilzan/ Tolzan-F @ 20-30ml for 100 kg body weight. |
| Goat | All age groups except three months or below | Deworming | - Give Ranizole suspension @ 3ml/ 10 kg body weight. |
| | | Fascioliosis | Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. |

Fishery:

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| Carp culture | Grow-out | Fish | <ul style="list-style-type: none"> - Fish harvesting can be started. - Ponds water depth should be maintained at 1.0-1.5m. - Feeds should be provided 1-2 times a day @ 3 % body weight per day. - Well balanced feed fortified with vitamins and minerals should be provided. - Maintain good quality of pond water. - To stock fish for next year above practices may be done in small scale. |
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 18th October, 2019

District: Tamenglong

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| Past weather for the of Imphal West (15th to 17th October, 2019): 6.6 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but on 17 th morning hours were foggy and afternoon was clear. Maximum temperature ranged from 28.3–29.6 °C and minimum of 19.4–19.7 °C. Mean relative humidity of 95.3 % max & 72.3 % min was recorded in the past three days & average wind speed was 1.0–2.2 km/ hr. | Weather forecast for Tamenglong (19th to 23rd October, 2019): Likely to have no rains upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 27-28 °C & mini. temp. 15-16 °C. Relative humidity may reach upto 96 % (max) & 54 % (min). The average wind speed may be 3-4 km/hr. |
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General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture. Use water economically to ensure its availability in coming months.
2. Harvest mature crops before rains. Clean and sundry seeds properly before storage. Store seeds in Seed Bin.
3. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (Urad dal)/ Lentil (Masoor dal)/ Green gram (Moong dal)/ Lathyrus (Kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.

| Field Crops | | | |
|--------------------|--------------------------------------|--------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Kharif Rice | Grain maturity to harvesting | | - Drain it out completely 10 days before harvesting. - Harvest rice if 80 % of the spikelet has turned yellow. - Stacking of the harvested panicles for 5-7 days by turning the heap of panicles can help in better threshing. - Harvested crop must be well threshed. Clean and sundry seeds properly before storage. |
| Soybean/ Rice Bean | Pod maturity to harvesting | | Harvest mature crop, sun-dry it for 2-3 days then thresh. Maintain required moisture content before storage for seed in Seed Bin. |
| Groundnut | Maturity to harvesting | | - Harvest the crop when 125 days old (var. ICGS-76) as well as dark tint inside the shell appears. - Make bundles and dry the crops in shade for 2-3 days for curing. Dry it for 4-5 days before storage. Select good quality pods for seeds. |
| Rapeseed | Seed collection and sowing | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. In foot-hills and upland area zero tillage rape seed may be sown just after harvesting rice to make full utilization of the residual moisture. |
| Field pea | Seed collection and land preparation | | - Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing. - Prepare land for sowing field pea. |
| Potato | Land preparation to planting | | - Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare. |
| Millet/ Blackgram | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest. |
| Seed 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. |
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| | | | sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m. |
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| Onion | Nursery raising | | - Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate. |
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Nodal Officer, GKMS