



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Bishnupur (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-24 °C & minimum temp. 7-8 °C and relative humidity may reach up to 100 % (max RH) & 40 % (min RH). The average wind speed may be 0-2 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



| | | | |
|--------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|-------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | • Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|-----------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | - Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018**Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Chandel (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6-8 °C and relative humidity may reach up to 99 % (max RH) & 49 % (min RH). The average wind speed may be 3 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



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“Gramin Krishi Mausam Seva”



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|--------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|-------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | <ul style="list-style-type: none"> Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | <ul style="list-style-type: none"> If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | <ul style="list-style-type: none"> Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. |
| | | • Deworming | • De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|-----------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | <ul style="list-style-type: none"> Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. Replace half of pond water with fresh & clean water at every 25-30 days interval. Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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**MANIPUR BULLETIN****5th January, 2018****Churachandpur**

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Weather forecast for next five days of Churachandpur (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6-7 °C and relative humidity may reach up to 100 % (max RH) & 38 % (min RH). The average wind speed may be 2-4 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
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Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

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|---------------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
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| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
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| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
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| | | • Deworming | • De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | <ul style="list-style-type: none"> Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. Replace half of pond water with fresh & clean water at every 25-30 days interval. Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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



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**MANIPUR BULLETIN****5th January, 2018****Imphal East**

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Weather forecast for next five days of Imphal East (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6-8 °C and relative humidity may reach up to 100 % (max RH) & 36 % (min RH). The average wind speed may be 0-4 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
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| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
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| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



| | | | |
|--------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|-------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | <ul style="list-style-type: none"> Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | <ul style="list-style-type: none"> If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | <ul style="list-style-type: none"> Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|-----------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | <ul style="list-style-type: none"> Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. Replace half of pond water with fresh & clean water at every 25-30 days interval. Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Imphal West (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6-8 °C and relative humidity may reach up to 100% (max RH) & 37% (min RH). The average wind speed may be 2-5 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



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“Gramin Krishi Mausam Seva”



| | | | |
|---------------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|--------------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | <ul style="list-style-type: none"> Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | <ul style="list-style-type: none"> If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | <ul style="list-style-type: none"> Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | <ul style="list-style-type: none"> Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. Replace half of pond water with fresh & clean water at every 25-30 days interval. Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018**Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Senapati (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 5-6 °C and relative humidity may reach up to 100 % (max RH) & 31 % (min RH). The average wind speed may be 2-4 km/hr.

| Field Crops | | | |
|--|-------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| Animal Sciences | | | |
| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
| Poultry (Chicken/ Duck) | All age groups | • Management | • Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |

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“Gramin Krishi Mausam Seva”

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|---------------|---------------------------------------|-----------------------|---|
| Pig | All age groups except the young ones | • Shearing for wool | • Sheep should be sheared during this month. |
| | | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Vaccination | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Tamenglong (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 5-6 °C and relative humidity may reach up to 100 % (max RH) & 36 % (min RH). The average wind speed may be 2-4 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



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“Gramin Krishi Mausam Seva”



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|--------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|-------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | • Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|-----------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | - Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****5th January, 2018****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Thoubal (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-24 °C & minimum temp. 7-8 °C and relative humidity may reach up to 100 % (max RH) & 45 % (min RH). The average wind speed may be 0-2 km/hr.

| Field Crops | | | |
|--|-------------------------------------|---|--|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
| | | Hairy caterpillar | - Spray Chloropyrifos @ 2ml/litre of water on the infected patches only. |
| Lentil/ Blackgram (late variety)/ Field Pea | Vegetative to flowering | Aphid | - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. |
| | | Powdery mildew & Yellow rust | - Spray Bayleton @ 7g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area. |
| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Potato | Vegetative | | - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. |
| | | Aphid | - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water. |
| | | Cut worm | If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cucurbits | Seed collection and nursery raising | | - Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10. |
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Onion | Vegetative | | - Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting. |
| Cole crops | Nursery raising | | - Nursery for late crops may be raised. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |



ICAR Research Complex for N.E.H. Region

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| | | | |
|--------|-------------------------|----------------|--|
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water. |
| Tomato | Vegetative to flowering | Early blight | - Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water. |
| | Sowing | | - Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m ² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m ² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days. |

Animal Sciences

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|-------------------------|---------------------------------------|------------------------|--|
| Poultry (Chicken/ Duck) | All age groups | • Management | • Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. |
| | | • Deworming | • De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

- Fodder cultivation: Oat crop may be sown immediately.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|-----------------|----------|------------|---|
| Carp culture | Grow-out | Pond water | - Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day. |
| | | Harvest | - As per market demand harvesting may be started. Stock fish for next year and for this practices mentioned below may be done in small scale. |
| | | Feeding | - Feeds should be provided once a day. |

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Scientist i/c, GKMS



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**MANIPUR BULLETIN****5th January, 2018****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 6th to 10th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (2nd to 4th January, 2018)

Observed overcast sky on 2nd upto 3rd Jan afternoon then partly cloudy thereafter with **7.8 mm** rainfall during past three days. Maximum temperature range of 20.2 to 21.3 °C and minimum temperature range of 8.7 to 11.0 °C with mean relative humidity 94.3 % max and 64.0 % min was recorded in the past three days.

Weather forecast for next five days of Ukhrul (6th to 10th January, 2018)

Likely to have clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 5-6 °C and relative humidity may reach up to 100 % (max RH) & 45 % (min RH). The average wind speed may be 3-4 km/hr.

Field Crops

| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
|--|-------------------------|------------------------------|--|
| Rapeseed/ Mustard/ | Flowering | 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, neem oil or Pyrethrin may be used. |
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| Rabi Maize | Early vegetative | | - Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize. |
| Seeds storage | Post harvest management | | For seed purpose store the seeds in RC-seed bins after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |

Horticulture Crops

| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
|-------------------------|-------------------------|---|---|
| Ginger/ Turmeric | Harvesting to storage | | For storing, prepare pit/ trench. Bottom layer should be covered with river bed soil (20cm thick). Prepare a dry twigs layer on the walls of the pit, put the rhizomes inside the pit and cover the upper surface with dry twigs. Cover the upper layer with the river bed soil. Protect them from rain. |
| Citrus | For nursery | Leaf Minor | - Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery. |
| | | Leaf eating caterpillar, thrips & mite. | - Spray Confidor @ 0.5 ml/ lit of water. |
| | For grown up trees | Powdery mildew | If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water. |
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| Sheep/ Goat | All age groups | • Vaccination | • If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |

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| | | | |
|---------------|---------------------------------------|-----------------------|---|
| Pig | All age groups except the young ones | • Shearing for wool | • Sheep should be sheared during this month. |
| | | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Vaccination | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
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| | | • Care & Management | • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

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