



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



MANIPUR BULLETIN

2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Bishnupur (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Sunday. The maximum temp. 20-21 °C & minimum temp. 10-11 °C and relative humidity may reach up to 88 % (max RH) & 34 % (min RH). The average wind speed may be 0-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water. - Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.

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



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MANIPUR BULLETIN

2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Chandel (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Wednesday. The maximum temp. 18-19 °C & minimum temp. 8-10 °C and relative humidity may reach up to 82 % (max RH) & 39 % (min RH). The average wind speed may be 3-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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	• Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
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2nd February, 2018

Churachandpur

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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
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Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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.

<i>Horticulture Crops</i>			
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French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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“Gramin Krishi Mausam Seva”



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	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
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• Fodder cultivation: Oat crop may be sown immediately.

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



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**MANIPUR BULLETIN****2nd February, 2018****Imphal East**

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Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



ICAR Research Complex for N.E.H. Region
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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.

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



ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Imphal West (3rd to 7th February, 2018) Likely to have no rainfall and clear sky upto Sunday. The maximum temp. 19-20 °C & minimum temp. 9-10 °C and relative humidity may reach up to 85 % (max RH) & 35 % (min RH). The average wind speed may be 3-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water. - Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.

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



ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Senapati (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Wednesday. The maximum temp. 15-17 °C & minimum temp. 5-7 °C and relative humidity may reach up to 80 % (max RH) & 33 % (min RH). The average wind speed may be 2 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	<ul style="list-style-type: none"> - Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		<ul style="list-style-type: none"> - Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	<ul style="list-style-type: none"> - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	<ul style="list-style-type: none"> Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Seeds storage	Post harvest management		<ul style="list-style-type: none"> 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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		<ul style="list-style-type: none"> - Prepare land for sowing bhindi.
Cole crops	Nursery raising		<ul style="list-style-type: none"> - Nursery for late crops may be raised.



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<i>Animal Sciences</i>			
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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.			

(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

2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Tamenglong (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Wednesday. The maximum temp. 17-18 °C & minimum temp. 7-8 °C and relative humidity may reach up to 84 % (max RH) & 36 % (min RH). The average wind speed may be 3 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water. - Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.

(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****2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Thoubal (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Sunday. The maximum temp. 20-21 °C & minimum temp. 10-11 °C and relative humidity may reach up to 88 % (max RH) & 34 % (min RH). The average wind speed may be 0-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		<ul style="list-style-type: none"> - Use quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 13 (90-105 days) or RCM 7 (110-120 days). - Seed rate:- transplanted crops: 50-60 kg/ha or broadcast (puddle field): 65-70 kg/ha or line planting : 30-40 kg/ha. - Prepare 700-800 m² area of rice nursery for transplanting of one hectare area. - Apply well decomposed FYM/ compost @ 1t/ 700 m² at the time of final leveling of nursery bed. - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	- Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Potato	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
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
Mango	Flowering		<ul style="list-style-type: none"> - Flower during 1st year of planting may be removed as it may suppress its corresponding growth that is essential in building up the young trees. - To protect from mango hopper, spray 800ml Malathion 50 EC or 700ml of Thiodan in 250 litres of water. - Paint the trunk of tree with Bordeaux paste (1:1:100) upto a height of 4-5 feet above the ground as prophylactic measure against diseases.
French bean	Land preparation and sowing		<ul style="list-style-type: none"> - Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Land preparation and sowing		- Prepare land for sowing bhindi.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel.



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			- Recommended varieties of water melon :- Sugar Baby, Madhavi-10, Madhuri and NS 295.
	Transplanting		- Transplant already raised 4-leaf stage seedlings under low cost polyhouse. If transplanted in open field then mulching materials like paddy straw should be used to protect young plants from cold. Light watering must be done for already transplanted seedlings during morning hours.
Onion	Vegetative to bulb formation initiation		- During the bulb formation stage check that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Tomato	Nursery to transplanting		- 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. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
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.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
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 and Swine Fever.
		• 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.

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

**ICAR Research Complex for N.E.H. Region**

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“Gramin Krishi Mausam Seva”**MANIPUR BULLETIN****2nd February, 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 3rd to 7th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (30th January to 1st February, 2018) Observed haze during morning hours and mainly clear sky during afternoon hours but overcast sky on 1st February, 2018 with no rainfall during past three days. Maximum temperature range of 19.4 to 20.4 °C and minimum temperature range of 1.9 to 6.7 °C with mean relative humidity 84.7 % max and 47.3 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Ukhrul (3rd to 7th February, 2018) Likely to have no rainfall and clear to partly cloudy sky upto Wednesday. The maximum temp. 17-18 °C & minimum temp. 6-8 °C and relative humidity may reach up to 84 % (max RH) & 36 % (min RH). The average wind speed may be 3 km/hr.</p>
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Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew	<ul style="list-style-type: none"> - Spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum .
Field Pea	Flowering/ fruiting to harvesting		<ul style="list-style-type: none"> - Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid	<ul style="list-style-type: none"> - For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	<ul style="list-style-type: none"> - Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and Nimbecidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - 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.
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Bhindi	Land preparation and sowing		<ul style="list-style-type: none"> - Prepare land for sowing bhindi.
Cole crops	Nursery raising		<ul style="list-style-type: none"> - Nursery for late crops may be raised.



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<i>Animal Sciences</i>			
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