



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

**MANIPUR BULLETIN****9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Bishnupur (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 24-25 °C & minimum temp. 9-10 °C and relative humidity may reach up to 66 % (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	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon :-



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Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



	Transplanting	Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative to bulb formation	- 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.
Cole crops	Nursery raising	- 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.
Tomato	Nursery to transplanting	- Nursery for late crops may be raised. - 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	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****9th February, 2018**Chandel

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<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Chandel (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 22-23 °C & minimum temp. 8-9 °C and relative humidity may reach up to 70 % (max RH) & 28 % (min RH). The average wind speed may be 3-5 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon :-



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	Transplanting		Sugar Baby, Madhavi-10, Madhuri and NS 295. - 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		- 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	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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.			

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<i>Field Crops</i>			
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Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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.

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Bhindi	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
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“Gramin Krishi Mausam Seva”



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Onion	Vegetative to bulb formation		- 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
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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****9th February, 2018**Imphal East

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		• 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

9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Imphal West (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 24-25 °C & minimum temp. 9-10 °C and relative humidity may reach up to 70 % (max RH) & 30 % (min RH). The average wind speed may be 2-4 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon :-



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



	Transplanting		Sugar Baby, Madhavi-10, Madhuri and NS 295. - 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		- 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	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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****9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Senapati (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 22-23 °C & minimum temp. 6-7 °C and relative humidity may reach up to 74 % (max RH) & 31 % (min RH). The average wind speed may be 2-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
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
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - 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



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“Gramin Krishi Mausam Seva”



			transplanted seedlings during morning hours.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Animal Sciences			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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

9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Tamenglong (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 22-23 °C & minimum temp. 7 - 8 °C and relative humidity may reach up to 70 % (max RH) & 34 % (min RH). The average wind speed may be 3-4 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon :-



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



	Transplanting		Sugar Baby, Madhavi-10, Madhuri and NS 295. - 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		- 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	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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****9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Thoubal (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 24-25 °C & minimum temp. 9-10 °C and relative humidity may reach up to 66 % (max RH) & 34 % (min RH). The average wind speed may be 0-4 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
Potato	Tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil is loose enough for better tuber growth.
		Late blight and leaf spot disease	- Late blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.
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>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon :-



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



	Transplanting	Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative to bulb formation	- 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.
Cole crops	Nursery raising	- 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.
Tomato	Nursery to transplanting	- Nursery for late crops may be raised. - 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	• Ranikhet disease	• Vaccinate against Ranikhet disease.
		• 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)
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ICAR Research Complex for N.E.H. Region
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**MANIPUR BULLETIN****9th 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 10th to 14th February, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 8th February, 2018) Observed partly cloudy to overcast with no rainfall during past three days. Maximum temperature range of 21.9 to 23.4 °C and minimum temperature range of 8.3 to 12.2 °C with mean relative humidity 89.3 % max and 41.7 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Ukhrul (10th to 14th February, 2018) Likely to have light rains upto Wednesday and partly cloudy to mainly cloudy sky. The maximum temp. 22-23 °C & minimum temp. 7-8 °C and relative humidity may reach up to 70 % (max RH) & 34 % (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	Nursery		- Maintain water level just to submerge the aerial sprouts and later increase the water level - When seedlings are 4-5 cm tall (7-10 days of sowing), apply 10 kg Urea and 3.5 kg MOP per 700 m ² as top dress along with 2 kg Carbofuran (3G) and spray Carbendazim 50% WP @ 1g/litres of water.
Rapeseed/ Mustard	Siliqua formation to maturity		- Keep four bee boxes may be in one hectare crop area. Avoid spray of insecticides in such area. Irrigation is essential at this stage for sustaining favorable condition for seed formation.
		Pieris brassica	If incidence of Pieris brassica is observed (which bore the pods of rapeseeds of mustard) then spray Coragen @ 2ml/15 lit of water.
Field Pea/ Lentil/ Blackgram (late variety)	Fruiting and maturity	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. - If the infestation is severe then spray Bayleton (Triaclemofon 25%WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
			Well filled up green pods should be harvested. Also top dressing @ 20 kg Urea per ha may be applied after first picking.
Rabi Maize	Vegetative		- When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation. Give light irrigation if the soil is dry.
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
French bean	Land preparation and sowing		- 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	Sowing		Land preparation for sowing bhindi may be done. Sowing of bhindi/ladies finger may be done at the spacing of 30cm x 45cm. Apply 25kg urea, 33kg DAP and 25kg MOP per sangam at final stage of land preparation before sowing. Recommended varieties are- 1. Arka Anamika 2. Pusa Sawani
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - 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



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			transplanted seedlings during morning hours.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Animal Sciences			
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