



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



MANIPUR BULLETIN

23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Bishnupur (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 30-31 °C & minimum temp. 14 °C. Relative humidity may reach up to 97 % (max RH) & 42 % (min RH). The average wind speed may be 2-4 km/hr.</p>
---	--

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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****23rd March, 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 24th to 28th March, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018)

Observed **no** rainfall with **clear sky** during past three days. Maximum temperature recorded ranged from **28.4 to 29.4 °C** and minimum of **10.7 to 13.6 °C** with mean relative humidity **90.3% max** and **34.0 % min** was recorded in the past three days.

Weather forecast for next five days of Chandel (24th to 28th March, 2018)

Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. **29-30 °C** & minimum temp. **12-13 °C**. Relative humidity may reach up to **78 % (max RH)** & **42 % (min RH)**. The average wind speed may be **4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



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



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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****23rd March, 2018**Churachandpur

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 24th to 28th March, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018)

Observed **no** rainfall with **clear sky** during past three days. Maximum temperature recorded ranged from **28.4 to 29.4 °C** and minimum of **10.7 to 13.6 °C** with mean relative humidity **90.3% max** and **34.0 % min** was recorded in the past three days.

Weather forecast for next five days of Churachandpur (24th to 28th March, 2018)

Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. **30-31 °C** & minimum temp. **11-12 °C**. Relative humidity may reach up to **94 % (max RH)** & **41 % (min RH)**. The average wind speed may be **4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



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



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.
Animal Sciences			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind
• Fodder cultivation: Berseem/ 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

23rd March, 2018

Imphal East

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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Imphal East (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 30-31 °C & minimum temp. 11-12 °C. Relative humidity may reach up to 94 % (max RH) & 41 % (min RH). The average wind speed may be 2 km/hr.</p>
---	---

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



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



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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

23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Imphal West (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 30-31 °C & minimum temp. 11-12 °C. Relative humidity may reach up to 94 % (max RH) & 41 % (min RH). The average wind speed may be 0-2 km/hr.</p>
---	---

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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****23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Senapati (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 26-27 °C & minimum temp. 9-10 °C. Relative humidity may reach up to 97 % (max RH) & 41 % (min RH). The average wind speed may be 2-3 km/hr.</p>
---	---

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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.



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



<i>Animal Sciences</i>			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind
• Fodder cultivation: Berseem/ 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

23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Tamenglong (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 26-28 °C & minimum temp. 9-10 °C. Relative humidity may reach up to 96 % (max RH) & 37 % (min RH). The average wind speed may be 3 km/hr.</p>
---	---

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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

23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Thoubal (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 30-31 °C & minimum temp. 14 °C. Relative humidity may reach up to 97 % (max RH) & 42 % (min RH). The average wind speed may be 2-4 km/hr.</p>
---	--

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Potato	Maturity to harvesting	Early blight	- Apply Mancozeb or Mancozeb + Metalaxyl @ 20-30 g/15 litre water.
			- Spray 3% Boric acid during curing period after harvesting to avoid insect pest infestation during storage.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. 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
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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	Bulb formation to maturity		- Light hoeing may be done.
		Thrips/ leaf minor	- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Cypermethrin @ 2ml/lit of water to the crop during bulb formation stage.
		Bulb rot	- Spray Sixer/ (Mencozeb + Carbendazim) @ 2 gm/lit of water as prophylactic measure against Bulb rot in the crops grown in shed.



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



Tomato	Flowering to fruiting		-40-45 days old tomato should be top dressed with 25 kg urea followed by earthing up and irrigation.
		Fruit borer	-Spray Sixer (Mencozeb 63 & Carbendazim 13) @ 2 gm/litre of water or Rakhwala (Biopesticide) @ 1.5-2 gm/ litre of water. After 2-3 days spray a dose of Dichlorovos 76 @ 0.5 ml/litre of water or Black dog against borer @ 0.75ml/litre of water.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind

• Fodder cultivation: Berseem/ 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****23rd March, 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 24th to 28th March, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (20th to 22nd March, 2018) Observed no rainfall with clear sky during past three days. Maximum temperature recorded ranged from 28.4 to 29.4 °C and minimum of 10.7 to 13.6 °C with mean relative humidity 90.3% max and 34.0 % min was recorded in the past three days.</p>	<p>Weather forecast for next five days of Ukhrul (24th to 28th March, 2018) Likely to have thunderstorm at isolated places and partly to mainly cloudy sky with, maximum temp. 26-28 °C & minimum temp. 9-10 °C. Relative humidity may reach up to 85 % (max RH) & 37 % (min RH). The average wind speed may be 3-4 km/hr.</p>
---	---

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Nursery to Transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. After 3-4 days of transplanting water level of 5-8 cm may be maintained. -If seedling is not ready for transplanting, apply DAP 2 Kg/ha before 10 days of uprooting or apply 1% urea (1 g dissolve in 1 litre water) and apply foliar spray.
Rabi Maize	Vegetative to pre-flowering		- If the soil is dry, give light irrigation to maintain soil moisture status. - Weeding may be done.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratio. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Planting		- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP. - Recommended varieties: For turmeric: Megha turmeric For ginger : Nadia - Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mancozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.
Chilli/ capsicum	Nursery		In chillies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack.
French bean	Sowing to vegetative		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha and for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Bhindi	Sowing to vegetative		- Land preparation for sowing bhindi may be done. Sowing of bhindi/ ladies finger may be done at the spacing of 30cm x 45cm. 42 kg Urea 94 kg SSP and 25 Kg MOP per sangam at final stage of land preparation before sowing. - Give light irrigation after 2-3 days of sowing.
Cucurbits	Transplanting to vegetative		- 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.



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



<i>Animal Sciences</i>			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
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. • PPR immunization must be done once in every three years.
		• Management	• Fly repellent must be used in the premises of the sheds • insecticides
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used
		• Management	• Breeding must be advocated continuously
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 • Adequate care must be ensured for protecting from untimely strong rain/wind
• Fodder cultivation: Berseem/ Oat crop may be sown immediately.			

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