



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

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear sky** during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Bishnupur (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **30 °C** & minimum temp. **15-16 °C**. Relative humidity may reach up to **100 %** (max RH) & **63 %** (min RH). The average wind speed may be **2-4 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.



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**Manipur Centre, Lamphelpat, Imphal - 795 004**  
**“Gramin Krishi Mausam Seva”**



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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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 save the animals.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed.
			• Avoid the cattle from chiting/ biting by flies. Adopt tick control measures • Adequate care must be ensured for protecting from untimely strong rain/wind
• Fodder cultivation: Berseem/ Oat crop may be sown immediately.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear** sky during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Chandel (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **29 °C** & minimum temp. **15 °C**. Relative humidity may reach up to **83 %** (max RH) & **35 %** (min RH). The average wind speed may be **3-5 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.



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**“Gramin Krishi Mausam Seva”**



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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN****10<sup>th</sup> April, 2018****Churachandpur**

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**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear sky** during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Churachandpur (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **29 °C** & minimum temp. **15 °C**. Relative humidity may reach up to **96 %** (max RH) & **53 %** (min RH). The average wind speed may be **4-6 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.





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**Manipur Centre, Lamphelpat, Imphal - 795 004**  
**“Gramin Krishi Mausam Seva”**



Animal Sciences			
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Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
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		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed.
			• Avoid the cattle from chiting/ biting by flies. Adopt tick control measures • Adequate care must be ensured for protecting from untimely strong rain/wind
• Fodder cultivation: Berseem/ Oat crop may be sown immediately.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS



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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

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**Weather forecast for next five days of Imphal East (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **29 °C** & minimum temp. **15 °C**. Relative humidity may reach up to **96 %** (max RH) & **53 %** (min RH). The average wind speed may be **4-6 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
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<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
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**Horticulture Crops**

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<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.



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



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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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





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

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear sky** during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Imphal West (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **29 °C** & minimum temp. **15 °C**. Relative humidity may reach up to **100 %** (max RH) & **48 %** (min RH). The average wind speed may be **0-2 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.



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



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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear** sky during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Senapati (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **26 °C** & minimum temp. **13-16 °C**. Relative humidity may reach up to **99 %** (max RH) & **54 %** (min RH). The average wind speed may be **2-4 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.

**Animal Sciences**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
<b>Sheep/ Goat</b>	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



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**“Gramin Krishi Mausam Seva”**



<b>Pig</b>	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
<b>Cattle</b>	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.			
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
<b>Cat fish (Ngakra)</b>	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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**Manipur Centre, Lamphelpat, Imphal - 795 004**  
**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear** sky during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Tamenglong (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **26 °C** & minimum temp. **13-16 °C**. Relative humidity may reach up to **98 %** (max RH) & **50 %** (min RH). The average wind speed may be **2-3 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.





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



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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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



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

**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear** sky during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Thoubal (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **30 °C** & minimum temp. **15-16 °C**. Relative humidity may reach up to **93 %** (max RH) & **43 %** (min RH). The average wind speed may be **2-4 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Cucurbits</b>	Transplanting to vegetative		- Construct proper drainage system to avoid water logging in and around the crop field. Drain out excess water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Onion</b>	Bulb maturity	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.
<b>Tomato</b>	Fruiting	Fruit borer	- Spray Sixer @ 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.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.



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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. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• 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.			
Fishery			
Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
Cat fish (Ngakra)	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

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**MANIPUR BULLETIN****10<sup>th</sup> April, 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 11<sup>th</sup> to 15<sup>th</sup> April, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (6<sup>th</sup> to 9<sup>th</sup> April, 2018)**

Observed **17.1 mm** rainfall with **mainly cloudy to overcast sky and mainly clear sky** during afternoon hours of 9<sup>th</sup> April. Maximum temperature recorded ranged from **26.6 to 27.8 °C** and minimum of **14.5 to 17.2 °C** with mean relative humidity **85.5 %** max and **56.5 %** min was recorded in the past four days.

**Weather forecast for next five days of Ukhrul (11<sup>th</sup> to 15<sup>th</sup> April, 2018)**

Likely to have scattered to fairly widespread thundery showers with squall during next five days and partly cloudy to overcast sky with maximum temp. **27 °C** & minimum temp. **14 °C**. Relative humidity may reach up to **87 %** (max RH) & **38 %** (min RH). The average wind speed may be **3-4 km/hr**.

**Field Crops**

\* Harvest rain water.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Pre-kharif Rice</b>	Vegetative		- Drainage and bunds may be constructed well for maintaining water level in the crop field. Drain out excess rain water if accumulated in the field. - Water depth may be maintained at 5-8 cm.
<b>Rabi Maize</b>	Vegetative to pre-flowering		- Drainage may be constructed well to avoid water logging in and around the crop field.
<b>Soybean/ Groundnut/ Blackgram/ Redgram</b>	Seed collection to Land preparation		- Collect good quality seeds from reliable source for sowing. - Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

\*\* Drainage may be constructed well to avoid water logging in and around the crop field.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Mango</b>	Flowering	Fruit fly/ beetle	- Use Methyl Eugenol as trap @ 4-10 traps/ sangam.
<b>Passion fruit</b>	Planting		It is right time for collection of terminal cuttings (pencil thickness) for passion fruit. Dip the cuttings in 500 ppm IBA (IBA 100 mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Khasi Mandarin</b>	For grown up		For grown up Khasi Mandarin, apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Kachai Lemon</b>	For grown up		For grown up Kachai Lemon apply 350g Urea, 400g SSP & 300g MOP per plant along with 30 kg cowdung manure compost in the soil surrounding the plant.
<b>Colocasia</b>	Land preparation for planting		- Prepare land for planting colocasia.

**Animal Sciences**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	• Strongly advise to Vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Coccidiosis	• Give Amprolium @2 gms/ litre of drinking water for 5-7 days.
<b>Sheep/ Goat</b>	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



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<b>Pig</b>	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
<b>Cattle</b>	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.			
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.
<b>Cat fish (Ngakra)</b>	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
	Fish		Male and female brooder fishes may be segregated for breeding operations.
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