



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



MANIPUR BULLETIN

5th June, 2018

Bishnupur

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

<p>Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018) Observed 89.4 mm rainfall with mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June. Maximum temperature recorded ranged from 29.9 to 31.7 °C and minimum of 21.0 to 21.8 °C with mean relative humidity 88.8 % max and 61.5 % min was recorded in the past four days with average wind speed was 3.1- 4.2 km/ hr.</p>	<p>Weather forecast for next five days of Bishnupur (6th to 10th June, 2018) Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. 31-32 °C & minimum temp. 21 °C. Relative humidity may reach up to 100 % (max RH) & 91 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



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			sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray 1 litre of CIFAX after dilution in one hectare Pond with EUS infected fishes.

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



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5th June, 2018

Chandel

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<p>Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018) Observed 89.4 mm rainfall with mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June. Maximum temperature recorded ranged from 29.9 to 31.7 °C and minimum of 21.0 to 21.8 °C with mean relative humidity 88.8 % max and 61.5 % min was recorded in the past four days with average wind speed was 3.1- 4.2 km/ hr.</p>	<p>Weather forecast for next five days of Chandel (6th to 10th June, 2018) Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. 29-30 °C & minimum temp. 19-20 °C. Relative humidity may reach up to 100 % (max RH) & 70 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



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Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
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• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water in one hectare pond with EUS infected fishes. Prepare the solution in non-metallic container.

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5th June, 2018

Churachandpur

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<i>Field Crops</i>			
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Fishery

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(I. Meghachandra Singh)
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**MANIPUR BULLETIN****5th June, 2018**Imphal East

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Maximum temperature recorded ranged from **29.9 to 31.7 °C** and minimum of **21.0 to 21.8 °C** with mean relative humidity **88.8 %** max and **61.5 %** min was recorded in the past four days with average wind speed was **3.1- 4.2 km/ hr.**

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

Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. **30-31 °C** & minimum temp. **21 °C**. Relative humidity may reach up to **100 %** (max RH) & **70 %** (min RH). The average wind speed may be **0-3 km/hr.**

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Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @ 2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



			sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray 1 litre of CIFAX after dilution in one hectare Pond with EUS infected fishes.

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



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

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

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

Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018)

Observed **89.4 mm** rainfall with **mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June.**

Maximum temperature recorded ranged from **29.9 to 31.7 °C** and minimum of **21.0 to 21.8 °C** with mean relative humidity **88.8 %** max and **61.5 %** min was recorded in the past four days with average wind speed was **3.1- 4.2 km/ hr.**

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

Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. **30-31 °C** & minimum temp. **21 °C**. Relative humidity may reach up to **100 %** (max RH) & **70 %** (min RH). The average wind speed may be **2-4 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



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Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



			sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray 1 litre of CIFAX after dilution in one hectare Pond with EUS infected fishes.

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



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

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

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

Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018)

Observed **89.4 mm** rainfall with **mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June.**

Maximum temperature recorded ranged from **29.9 to 31.7 °C** and minimum of **21.0 to 21.8 °C** with mean relative humidity **88.8 %** max and **61.5 %** min was recorded in the past four days with average wind speed was **3.1- 4.2 km/ hr.**

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

Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. **26-27 °C** & minimum temp. **18-19 °C**. Relative humidity may reach up to **100 % (max RH) & 70 % (min RH)**. The average wind speed may be **0-4 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @ 2g/l of water. - Avoid deposition of water on the leaves.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at



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“Gramin Krishi Mausam Seva”



			10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water in one hectare pond with EUS infected fishes. Prepare the solution in non-metallic container.

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



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

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

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

Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018)

Observed **89.4 mm** rainfall with **mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June.**

Maximum temperature recorded ranged from **29.9 to 31.7 °C** and minimum of **21.0 to 21.8 °C** with mean relative humidity **88.8 %** max and **61.5 %** min was recorded in the past four days with average wind speed was **3.1- 4.2 km/ hr.**

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

Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. **27-28 °C** & minimum temp. **19-20 °C**. Relative humidity may reach up to **99 % (max RH) & 64 % (min RH)**. The average wind speed may be **2-3 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @ 2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



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			sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water in one hectare pond with EUS infected fishes. Prepare the solution in non-metallic container.

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



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



MANIPUR BULLETIN

5th June, 2018

Thoubal

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

<p>Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018) Observed 89.4 mm rainfall with mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June. Maximum temperature recorded ranged from 29.9 to 31.7 °C and minimum of 21.0 to 21.8 °C with mean relative humidity 88.8 % max and 61.5 % min was recorded in the past four days with average wind speed was 3.1- 4.2 km/ hr.</p>	<p>Weather forecast for next five days of Thoubal (6th to 10th June, 2018) Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. 31-32 °C & minimum temp. 21-22 °C. Relative humidity may reach up to 100 % (max RH) & 70 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Brinjal	Flowering and fruiting	Shoot & fruit borer	- Prune dropping shoots and burn it. Destroy the fruit along with borer. - Spray Cypermethrin @ 2ml/ lit of water or Imidachloprid @ 1ml/ litre of water.
Cucurbits	Flowering, Fruiting and Harvesting	Powdery Mildew/ Downy Mildew	- Apply Sulfex (Sulphur fungicide) or Propiconazole 25% E.C. @ 2g/l of water. - Avoid deposition of water on the leaves.
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water.
Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



			sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised 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.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• 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. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
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. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• 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/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

• Fodder cultivation: Berseem/ oat crop may be sown immediately.

Fishery

Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray 1 litre of CIFAX after dilution in one hectare Pond with EUS infected fishes.

(I. Meghachandra Singh)
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MANIPUR BULLETIN

5th June, 2018

Ukhrul

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

<p>Significant past weather for the preceding bi-weekly of Imphal - West (1st to 4th June, 2018) Observed 89.4 mm rainfall with mainly cloudy to overcast sky from 2nd to 4th June morning but mainly clear to partly cloudy on 1st June and afternoon hours of 4th June. Maximum temperature recorded ranged from 29.9 to 31.7 °C and minimum of 21.0 to 21.8 °C with mean relative humidity 88.8 % max and 61.5 % min was recorded in the past four days with average wind speed was 3.1- 4.2 km/ hr.</p>	<p>Weather forecast for next five days of Ukhrul (6th to 10th June, 2018) Likely to have widespread light to moderate rains during next five days and partly cloudy to overcast sky with maximum temp. 27-28 °C & minimum temp. 19-20 °C. Relative humidity may reach up to 99 % (max RH) & 87 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Maintain water level at 5-8 cm. - Monitor rice fields regularly for insect pest infestation. - Apply Propiconazole @ 15ml/ 15 litres water.
	Nursery and land preparation of main field (Kharif rice)		- Raise kharif rice nursery. Varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. - Apply well decomposed FYM/ compost @ 1t/ 700 sq. m. at final leveling of nursery bed. After 7-10 days of sowing, apply 17-20 kg Urea and 3.5 kg of MOP per 700 m ² along with 2 kg Carbofuran 3G, 2g Streptocycline and 20g Carbendazim. Maintain water level just to submerge green sprouts. - Land preparation of main field may be started for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
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 ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

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Colocassia	Vegetative		At present, earthing up may be done after the wet spell at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at



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			10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.

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Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
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Type of Farming	Stage	Management	Agro-metrological advisories	
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		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water in one hectare pond with EUS infected fishes. Prepare the solution in non-metallic container.

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