

Field Crops

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (20th to 23rd April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to**20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Bishnupur (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 15-16 °C. Relative humidity may reach up to 100 % (max RH) & 31 % (min RH). The average wind speed may be 0-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops	1	T	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Maize	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/			- Collect good quality seeds from reliable source for sowing.
Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
Blackgram/	Land preparation		be started.
Redgram			- 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.
	D 41		For seed purpose store the seeds in RC-Seed Bin after proper drying and
Coods stores	Post harvest		cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check fo moisture content or weight of charcoal and dry if required.
Seeds storage	management		For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops	l		Manufacture 170 on the wants of stores.
** Drainage may be cor	nstructed well to avoid	l water logging in and a	round the crop field.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to vegetative	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre o water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) of Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Animal Science	ees		
		ls to protect from strong win	
			g area of 3ft width) using the repellent agent/insecticides spray.
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 repellant must be used in the premises of the sheds.
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 Anti-Psoroptic 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
		1:-4-1	• Adequate care must be ensured for protecting from untimely strong rain/wind

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

Fishery

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

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	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
. 5	Feed		Well balanced feed may be fed @ 3-5% body weight/day.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th April, 2018

<u>Chandel</u>

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 25th to April, 2018 as below:

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Weather forecast for next five days of Chandel (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 28-29 °C & minimum temp. 14-15 °C. Relative humidity may reach up to 85 % (max RH) & 25 % (min RH). The average wind speed may be 3-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 - Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. - Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Mark	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/			- Collect good quality seeds from reliable source for sowing.
Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
Blackgram/	Land preparation		be started.
Redgram			- 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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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	1		1.1 6.11
** Drainage may be con			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of
	vegetative		water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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

Avoid the cattle from chiting/ biting by flies. Adopt tick control measures
 Adequate care must be ensured for protecting from untimely strong rain/wind



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





Animal Sciences					
* Repair the sheds of birds and animals to protect from strong winds and rains.					
* Disinfect the fo	* Disinfect the farm premises of all livestock/ poultry (surrounding area of 3ft width) using the repellent agent/ insecticides spray.				
Name of bird/	Stage	Disease and	Agro-meteorological advisories		
animal		Management			
Poultry	All age groups	Ranikhet disease	Strongly advised to Vaccinate against Ranikhet disease. Vaccinate the flock		
(Chicken/			using Lasota strain vaccine through ocular route if the age of chick is less than		
Duck)			21 days and through nasal route if it is older than 21 days.		
İ		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.,		
İ			Enterotoxaemia, etc. do it in this month.		
İ			PPR immunization must be done once in every three years.		
		Management	• Fly repellant must be used in the premises of the sheds.		
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.		
l		Vaccination	Vaccinate against FMD and Swine Fever.		
l		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-		
İ			30ml for 100 kg body weight.		
l		Care & Management	Mixture of mineral/ salts should be added in the feed.		

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

Fisherv

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

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	Field		Prepare trenches/channels in rice field to a depth of 1.0 - 1.5m. 30-40% of the
fish culture			rice fields can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water	•	Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
(18-1	Feed		Well balanced feed may be fed @ 3-5% body weight/day.



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24th April, 2018

Churachandpur

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Weather forecast for next five days of Churachandpur (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 15-16 °C. Relative humidity may reach up to 95 % (max RH) & 35 % (min RH). The average wind speed may be 2-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 - Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. - Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		Drainage may be constructed well to avoid water logging in and around the crop field.Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Mark	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/ Groundnut/ Blackgram/ Redgram	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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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 cor	structed well to avoice	l water logging in and a	round the crop field.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to vegetative	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		- Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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



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Animal Science			
		ls to protect from strong win	nds and rains. g area of 3ft width) using the repellent agent/ insecticides spray.
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 A	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 repellant must be used in the premises of the sheds.
Pig	All age groups	De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
	except the young	Vaccination	Vaccinate against FMD and Swine Fever.
	ones	Skin disease	• Sprayer of Anti-Psoroptic may be used.
		Management	Breeding must be advocated continuously.
e	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	ation: Berseem/ oat cro	p may be sown immediately.	

Fishery

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

Type of	Stage	management	Agro-metrological advisories
Farming		_	
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	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40%
fish culture			of the rice field can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

SMS

Lakliba Thangjadagi mafam ayambada nong khara yamna churaba yai. Nong ishing yokpiyu amadi loufamda ahenba ishing tungsindanaba louri loukhong semjinbiyu. Haar happa/ til hidak chaiba amadi mahei-marong lokpa nong laktringeida loisanbiyu.



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Imphal East

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Weather forecast for next five days of Imphal East (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 15-16 °C. Relative humidity may reach up to 90 % (max RH) & 26 % (min RH). The average wind speed may be 3-5 km/hr.

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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
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	vegetative		water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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



Manipur Centre, Lamphelpat, Imphal - 795 004





Animal Science	ces		
		ls to protect from strong win	
			g area of 3ft width) using the repellent agent/insecticides spray.
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	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 repellant must be used in the premises of the sheds.
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 Anti-Psoroptic 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

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

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	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
. 3	Feed		Well balanced feed may be fed @ 3-5% body weight/day.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (20th to 23rd April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to **20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Imphal West (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 15-16 °C. Relative humidity may reach up to 94 % (max RH) & 36 % (min RH). The average wind speed may be 3-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 - Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. - Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Mark	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/			- Collect good quality seeds from reliable source for sowing.
Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
Blackgram/	Land preparation		be started.
Redgram			- 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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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	1		1.1 6.11
** Drainage may be con			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of
	vegetative		water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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



Manipur Centre, Lamphelpat, Imphal - 795 004





Animal Science	ces		
		ls to protect from strong win	
			g area of 3ft width) using the repellent agent/insecticides spray.
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 ag	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 repellant must be used in the premises of the sheds.
Pig	All age groups	De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	except the young ones	Vaccination	Vaccinate against FMD and Swine Fever.
	ones	Skin disease	• Sprayer of Anti-Psoroptic 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

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

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	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
. 3	Feed		Well balanced feed may be fed @ 3-5% body weight/day.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(20^{th}$ to 23^{rd} April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to **20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Senapati (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 25-26 °C & minimum temp. 12-13 °C. Relative humidity may reach up to 89 % (max RH) & 38 % (min RH). The average wind speed may be 3-5 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the cro	op Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Waize	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/ Groundnut/ Blackgram/ Redgram	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.
Seeds storage Post harvest management			For seed purpose store the seeds in <i>RC-Seed Bin</i> 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 Cro			
<u> </u>		oid water logging in and a	
Name of the crop		Pest and disease	Agro-meteorological advisories
Bhindi Ginger & turme	Sowing ric Planting		Bhindi may be sown at the spacing of 30cm X 45cm. Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to vegetative	Mite Red Pumpkin	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water. If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or
		Beetle	Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Colocasia Land preparation for planting			- Prepare land for planting colocasia.
		protect from strong wind	ds and rains. area of 3ft width) using the repellent agent/ insecticides spray.
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/	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



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Duck)			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 repellant must be used in the premises of the sheds.
Pig	All age groups	De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	except the young	Vaccination	Vaccinate against FMD and Swine Fever.
	ones	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
		n may be sour immediately	Adequate care must be ensured for protecting from untimely strong rain/wind

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

Fishery

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

Type of	Stage	management	Agro-metrological advisories
Farming			
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	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40%
fish culture			of the rice field can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

SMS:

Lakliba Thangjadagi mafam ayambada nong khara yamna churaba yai. Nong ishing yokpiyu amadi loufamda ahenba ishing tungsindanaba louri loukhong semjinbiyu. Haar happa/ til hidak chaiba amadi mahei-marong lokpa nong laktringeida loisanbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(20^{th}$ to 23^{rd} April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to**20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Tamenglong (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 28-29 °C & minimum temp. 14-15 °C. Relative humidity may reach up to 92 % (max RH) & 32 % (min RH). The average wind speed may be 3-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 - Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. - Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Maize	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/			- Collect good quality seeds from reliable source for sowing.
Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
Blackgram/	Land preparation		be started.
Redgram			- 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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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 con	nstructed well to avoid		round the crop field.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of
	vegetative		water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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



Manipur Centre, Lamphelpat, Imphal - 795 004



"Gramin Krishi Mausam Seva"



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 A	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 repellant must be used in the premises of the sheds.
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.
e	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

Fishery

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

Type of	Stage	management	Agro-metrological advisories
Farming			
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	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40%
fish culture			of the rice field can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

SMS:

Lakliba Thangjadagi mafam ayambada nong khara yamna churaba yai. Nong ishing yokpiyu amadi loufamda ahenba ishing tungsindanaba louri loukhong semjinbiyu. Haar happa/ til hidak chaiba amadi mahei-marong lokpa nong laktringeida loisanbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(20^{th}$ to 23^{rd} April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to**20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Thoubal (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 15-16 °C. Relative humidity may reach up to 99 % (max RH) & 25 % (min RH). The average wind speed may be 2 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 - Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. - Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking		 Drainage may be constructed well to avoid water logging in and around the crop field. Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Maize	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/			- Collect good quality seeds from reliable source for sowing.
Groundnut/	Seed collection to		- Land preparation for sowing of soybean/ groundnut/ blackgram/ redgram may
Blackgram/	Land preparation		be started.
Redgram			- 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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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 con	nstructed well to avoid		round the crop field.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turmeric	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to	Mite	To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of
	vegetative		water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Onion	Bulb maturity to harvesting		-Onion bulbs may be harvested and spread in the shed, let it dry for about 7-10 days without cutting the leaves to hasten the maturity. After this, cut the leaves and roots, injured and damaged ones may be sorted out and graded.
Colocasia	Land preparation for planting		- Prepare land for planting colocasia.
Tomato	Fruiting to harvesting	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



Manipur Centre, Lamphelpat, Imphal - 795 004



"Gramin Krishi Mausam Seva"



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 A	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 repellant must be used in the premises of the sheds.
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.
e	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

Fishery

- * New fish ponds may be made or old ones may be renovated/ cleaned before for large scale fish culture.
- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

Type of	Stage	management	Agro-metrological advisories
Farming			
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	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40%
fish culture			of the rice field can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

SMS:

Lakliba Thangjadagi mafam ayambada nong khara yamna churaba yai. Nong ishing yokpiyu amadi loufamda ahenba ishing tungsindanaba louri loukhong semjinbiyu. Haar happa/ til hidak chaiba amadi mahei-marong lokpa nong laktringeida loisanbiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

24th 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 25th to April, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(20^{th}$ to 23^{rd} April, 2018)

Observed **21.4 mm** rainfall with but **mainly cloudy to overcast sky** but mainly clear on 23rd April. Maximum temperature recorded ranged from **22.0** to **29.5** °C and minimum of **17.1** to **20.5** °C with mean relative humidity **83.5** % max and **68.25** % min was recorded in the past four days.

Weather forecast for next five days of Ukhrul (21st to 25th April, 2018)

Likely to have scattered rainfall with squall upto Friday then widespread rainfall thereafter during next five days and mainly cloudy to overcast sky with maximum temp. 27-29 °C & minimum temp. 13-15 °C. Relative humidity may reach up to 86 % (max RH) & 34 % (min RH). The average wind speed may be 3-4 km/hr.

^{*} Harvest rain water for future use. Harvesting mature crops, fertilizer application or insecticide or pesticide sprays may be done before rains.

Field Crops			
Name of the cro	op Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Tillering		 Maintained optimum water depth of 5-8cm in the field. Drain out excess water if accumulated due to rain in crop field. Before widespread rains, hand weeding may be done at 20-30 days after transplanting. Drain out excess water and top dress with Urea @ 33kg/ ha and MOP @ 22kg/ ha. Irrigate again after 48 hours of fertilizer application.
Maize	For Rabi Maize Vegetative to flowering & silking	ng	Drainage may be constructed well to avoid water logging in and around the crop field.Construct wind breaks to avoid uprooting of standing crops by the high speed winds.
Maize	Kharif maize Land preparation and seed collection		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. Procure disease free quality seeds from reliable source.
Soybean/ Groundnut/ Blackgram/ Redgram	Seed collection 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.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> 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 Cro			
** Drainage may b	e constructed well to a	void water logging in and a	round the crop field.
Name of the cro	p Stage	Pest and disease	Agro-meteorological advisories
Bhindi	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
Ginger & turme	Planting		Spacings for planting of ginger (25cm plant to plant and 25-30cm row to row) and turmeric (25cm plant to plant and 40-45cm row to row).
Cucurbits	Transplanting to vegetative		To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Red Pumpkin Beetle	If Red Pumpkin Beetle infestation is observed, Carbaryl (0.2%) or Chloropyriphos (0.05%) may be sprayed or use Methyl Euginol as trap @ 4-10 traps/ sangam.
Colocasia	Land preparation for planting	on	- Prepare land for planting colocasia.
Animal Sciences			
		to protect from strong wind	
		Disease and	area of 3ft width) using the repellent agent/insecticides spray.
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/	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



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Duck)			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 repellant must be used in the premises of the sheds.
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

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- * Care must be taken for newly rain fed ponds by liming for stocking fish fries/ fingerlings or yearlings.
- * Intensive care must be taken for fish brooders by keeping them in separate ponds. It must be provided with balanced feed and good quality water.

Type of	Stage	management	Agro-metrological advisories
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		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	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40%
fish culture			of the rice field can be converted into trenches/ditch/channels for paddy cum fish
			culture.
Cat fish	Pond and water		Pond water may be replenished with fresh water maintaining a depth of 1m.
(Ngakra)	Fish		Male and female brooder fishes may be segregated for breeding operations.
, , ,	Feed		Well balanced feed may be fed @ 3-5% body weight/day.

SMS:

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