

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Bishnupur (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 25-26 $^{\circ}$ C & minimum temp. 9-10 $^{\circ}$ C and relative humidity may reach up to 94% (max RH) & 37% (min RH). The average wind speed may be 0-2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew, white rust & Alternaria blight	- Insecticide sprays must be given during afternoon hours only For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once - Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew & rust	 For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative	Tust	- Light irrigation may be given to keep soil moist if the soil is dry.
Potato	Vegetative to tuber formation	Thrips Cut worm	- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth. Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively. Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management	Cut worm	For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying an cleaning of seeds along with dry charcoal at 80:20. Check for moisture conter or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwar varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		 Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. Recommended varieties of water melon: Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
Tomato		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germinate in 4.5 days.
Name of bird/ animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			Parasitic	Give Alaphondin @ 1 gill inte of drinking water for 3-7 days. Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	neep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			- Wanagement	• Increase energy feed by 5%.
Pig	except the young		Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
			De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	ones	es	Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the yo ones		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:	1 ~		Tar	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		s/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
^	broo	oders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 2018

Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Chandel (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6-7 °C and relative humidity may reach up to 91% (max RH) & 47% (min RH). The average wind speed may be 3 km/hr.

Field Crops	T ~:	T =	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection		- Procure disease free and well filled quality seeds of pre-kharif rice for sowing.
	and land		Recommended variety: RCM 12
	preparation for		- Land preparation for raising rice nursery may be started.
	nursery	Aphid	
		Apnid	- Insecticide sprays must be given during afternoon hours only For organic control against aphid, sprays that consist of Azadirachtin, neem oil
			or Pyrethrin may be used.
Rapeseed/	Eleverine to		If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once
_	Flowering to	Downy mildew,	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing
Mustard	fruiting	Powdery mildew,	or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
		white rust &	or spray Garne Buio Extract (\$1) @ 1% or Trichoderma narzianum.
		Alternaria blight	
	Flowering to	Alternaria oligiit	- Retain early pods of selected plants for seeds.
Field Pea	fruiting		- Retain early pous of selected plants for seeds.
	nunng	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil
Lentil/ Blackgram	Flowering to		or Pyrethrin may be used.
(late variety)	fruiting	Powdery mildew &	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and
(1000 (01100))	8	rust	nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- Light irrigation may be given to keep soil moist if the soil is dry.
	v egetati v e		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for
	Vegetative to tuber formation		better tuber growth.
Potato		Thrips	Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon,
2 00000		r ·	0.03% dimethoate, methyl demeton or thiometon control the pest effectively.
		Cut worm	Spray Carbaryl @ 30ml/15 litre of water against cut worm.
			For seed purpose store the seeds in RC-seed bins after proper drying and
	Post harvest		cleaning of seeds along with dry charcoal at 80:20. Check for moisture content
Seeds storage	management		or weight of charcoal and dry if required.
O			For grains, store grains in well ventilated godowns after drying proper. Sprag
			Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation		- Sowing of French bean may be done in prepared land. Seed rate for dwar
	and sowing		varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from
			seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cr
			with 2-3 seeds per hill).
			- Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch
			and trays under polyhouse/ poly-tunnel.
			- Recommended varieties of water melon :-
			Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg
			Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
Tomato		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germinate in 4.5 days.
Name of bird/ animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			Parasitic	Give Alaphondin @ 1 gill inte of drinking water for 3-7 days. Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	neep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			- Wanagement	• Increase energy feed by 5%.
Pig	except the young		Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
			De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	ones	es	Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the yo ones		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:	1 ~		Tar	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		s/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
^	broo	oders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 2018

Churachandpur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Churachandpur (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 23-24 °C & minimum temp. 7-8 °C and relative humidity may reach up to 94% (max RH) & 39% (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
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/	Flowering to	Aphid	Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
Mustard	fruiting	Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram	Flowering to	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
(late variety)	fruiting	Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- Light irrigation may be given to keep soil moist if the soil is dry.
	Vegetative to tuber formation		- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth.
Potato		Thrips	Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively.
		Cut worm	Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.
O			For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. - Recommended varieties of water melon: - Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
Tomato		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germinate in 4.5 days.
Name of bird/ animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			Parasitic	Give Alaphondin @ 1 gill inte of drinking water for 3-7 days. Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	neep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			- Wanagement	• Increase energy feed by 5%.
Pig	except the young		Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
			De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	ones	es	Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the yo ones		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:	1 ~		Tar	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		s/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
^	broo	oders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 2018

Imphal East

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Imphal East (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 23-24 °C & minimum temp. 7-8 °C and relative humidity may reach up to 94% (max RH) & 39% (min RH). The average wind speed may be 2-4 km/hr.

Field Crops	T	1	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Aphid Downy mildew, Powdery mildew, white rust & Alternaria blight	- Insecticide sprays must be given during afternoon hours only For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting	Thermana origin	- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew &	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and
Rabi Maize	Vegetative	rust	nimbicidin (0.3%) to control rust disease. - Light irrigation may be given to keep soil moist if the soil is dry.
Potato	Vegetative to tuber formation	Thrips Cut worm	- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth. Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively. Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management	Cut worm	For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		 Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. Recommended varieties of water melon: Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
Tomato		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germinate in 4.5 days.
Name of bird/ animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			Parasitic	Give Alaphondin @ 1 gill inte of drinking water for 3-7 days. Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	neep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			- Wanagement	• Increase energy feed by 5%.
Pig	except the young		Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
			De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
	ones	es	Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the yo ones		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:	1 ~		Tar	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		s/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
^	broo	oders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Imphal West (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 23-24 $^{\rm o}$ C & minimum temp. 7-8 $^{\rm o}$ C and relative humidity may reach up to 94% (max RH) & 39% (min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew, white rust & Alternaria blight	 Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once. Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew & rust	For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- Light irrigation may be given to keep soil moist if the soil is dry.
Potato	Vegetative to tuber formation	Thrips Cut worm	- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth. Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively. Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. Recommended varieties of water melon: Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.







			Leaf eating caterpillar, thrips &	- Spray Confidor @ 0.5 ml/ lit of water.
			mite.	
		For grown up	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray
trees			Bayleton @7 g / 15 lit of water.	
Tomato		Nursery to transplanting		- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.
				- Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m ²
				area, keep the bed covered with gunny bag for at least 24 hrs.
				- Sow seeds @ 10g/3m ² area keep the bed covered with gunny bag. Seeds will
Animal Scienc	000			germinate in 4-5 days.
Name of		Stage	Disease and	Agro-meteorological advisories
bird/ animal		29	Management	
Poultry (Chicken/ Duck)	Oultry All age groups Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			Parasitic	 Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	All as	ge groups	Vaccination	If the animals have not been vaccinated against F.M.D., B.Q., H.S.,
энсер/ Зош		9- 8F-	v accination	Enterotoxaemia, etc. this must be done during this month.
				Take adequate care to prevent occurrence of Mastitis.
				• PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
7.	A 11			• Increase energy feed by 5%.
Pig		ge groups ot the young	Coccidial infection	• Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
	ones	of the young	De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
			Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the you ones		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	 Adequate care must be ensured for prevention of mastitis for the milch animals.
	ation: O	at crop may be	sown immediately.	
Fishery:	64-		Managamari	A and making a charles designed as
Type of Farming	Stag	ge	Management	Agro-metrological advisories
ī		s/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
Carp culture	broo	oders	Feed	Provide feed 1-2 times @ 2 % body weight per day.
			Fish	 Male and female brooders should be stock in separate ponds for early breeding programs. harvesting of fish may be done in area where water availability is low.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Senapati (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 20-21 $^{\circ}$ C & minimum temp. 5-6 $^{\circ}$ C and relative humidity may reach up to 88% (max RH) & 34% (min RH). The average wind speed may be 3-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Aphid Downy mildew, Powdery mildew,	 Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once. Spray Redomil MZ 72 WP @ 2g/litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
		white rust & Alternaria blight	
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram	Flowering to	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
(late variety)	fruiting	Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative		- Light irrigation may be given to keep soil moist if the soil is dry.
Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	-	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
	For nursery	Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.



Manipur Centre, Lamphelpat, Imphal - 795 004





Animal Science	ees		
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		 Coccidiosis 	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		Parasitic	Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	All age groups	Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
		De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		Management	 Avoid dampness to protect from Pneumonia. Increase energy feed by 5%.
Pig	All age groups except the young ones	Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
		De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
		Vaccination	Vaccinate against FMD and Swine Fever.
		Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the young ones	Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
		Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Care & Management	 Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
		Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
Fodder cultiva	ation: Oat crop may be	sown immediately.	

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



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Tamenglong (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 5-6 °C and relative humidity may reach up to 88% (max RH) & 34% (min RH). The average wind speed may be 3-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew, white rust & Alternaria blight	 Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once. Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew & rust	For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative	Tust	- Light irrigation may be given to keep soil moist if the soil is dry.
Potato	Vegetative to tuber formation	Thrips Cut worm	- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth. Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively. Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management	Cut worm	For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops	•		
Name of the crop French bean	Stage Land preparation	Pest and disease	Agro-meteorological advisories - Sowing of French bean may be done in prepared land. Seed rate for dwarf
	and sowing		varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		 Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. Recommended varieties of water melon: Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
trees Tomato Nursery to		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germanic in 10 days
Name of bird/animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups (Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			• Parasitic	Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	Sheep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			Vianagement	• Increase energy feed by 5%.
Pig	All a	ge groups	Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
	_	ot the young	De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
	ones		Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	Cattle All age group excepts the years		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:			1 3 6	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		Fries/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
	brooders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Thoubal (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 25-26 $^{\circ}$ C & minimum temp. 9-10 $^{\circ}$ C and relative humidity may reach up to 94% (max RH) & 37% (min RH). The average wind speed may be 0-2 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		 Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Downy mildew, Powdery mildew, white rust & Alternaria blight	 Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once. Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting		- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew & rust	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
Rabi Maize	Vegetative	Tust	- Light irrigation may be given to keep soil moist if the soil is dry.
Potato	Vegetative to tuber formation	Thrips Cut worm	- Give light irrigation if the soil is dry. Ensure that the soil loose enough for better tuber growth. Spraying with Tracer (spinosad) 48 SC @ 300 ml/ha or 0.02% phosphamidon, 0.03% dimethoate, methyl demeton or thiometon control the pest effectively. Spray Carbaryl @ 30ml/ 15 litre of water against cut worm.
Seeds storage	Post harvest management	Cut worm	For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cucurbits	Nursery raising		 Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse/ poly-tunnel. Recommended varieties of water melon: Sugar Baby, Madhavi-10, Madhuri and NS 295.
Onion	Vegetative		- Apply 60kg Urea, 62 Kg SSP and 25 kg MOP as basal dose and apply 60kg Urea/ sangam after 30-35 days after transplanting.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.







			Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
trees Tomato Nursery to		For grown up trees		If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.
		Nursery to transplanting		 Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field. Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/3m² area, keep the bed covered with gunny bag for at least 24 hrs. Sow seeds @ 10g/3m² area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.
Animal Scienc	es			germanic in 10 days
Name of bird/animal		Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	Poultry All age groups (Chicken/		Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
			Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
			• Parasitic	Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat	Sheep/ Goat All age groups		Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
			De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
			Management	Avoid dampness to protect from Pneumonia.
			Vianagement	• Increase energy feed by 5%.
Pig	All a	ge groups	Coccidial infection	Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
	_	ot the young	De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
	ones		Vaccination	Vaccinate against FMD and Swine Fever.
			Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	Cattle All age group excepts the years		Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
			Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
			Care & Management	 Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
			Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
	tion: O	at crop may be	sown immediately.	
Fishery:			1 3 6	
Type of Farming	Stag	ge	Management	Agro-metrological advisories
Carp culture		Fries/ fingerlings/	Pond and water	Remove aquatic weeds. Maintain minimum depth of 1.5 – 2.0 m. Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly. Provide feed 1.2 times @ 2.96 body weight per day.
	brooders	Feed Fish	Provide feed 1-2 times @ 2 % body weight per day. - Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

19th January, 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 20th to 24th January, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th January, 2018)

Observed mainly clear sky but partly cloudy to overcast from 16^{th} afternoon to 17^{th} Jan with **no** rainfall during past three days. Maximum temperature range of 22.7 to 22.9 °C and minimum temperature range of 6.7 to 9.6 °C with mean relative humidity 90 % max and 52.7 % min was recorded in the past three days.

Weather forecast for next five days of Ukhrul (20th to 24th January, 2018)

Likely to have dense fog at isolated places during morning hours and clear sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 5-6 °C and relative humidity may reach up to 88% (max RH) & 34% (min RH). The average wind speed may be 3-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Pre-kharif Rice	Seed collection and land preparation for nursery		Procure disease free and well filled quality seeds of pre-kharif rice for sowing. Recommended variety: RCM 12 Land preparation for raising rice nursery may be started.
Rapeseed/ Mustard	Flowering to fruiting	Aphid Downy mildew, Powdery mildew, white rust & Alternaria blight	 Insecticide sprays must be given during afternoon hours only. For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once. Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
Field Pea	Flowering to fruiting	Alternaria oligiit	- Retain early pods of selected plants for seeds.
Lentil/ Blackgram (late variety)	Flowering to fruiting	Aphid Powdery mildew &	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and
D 1 ' 3 / '	V	rust	nimbicidin (0.3%) to control rust disease. - Light irrigation may be given to keep soil moist if the soil is dry.
Rabi Maize Seeds storage	Post harvest management		For seed purpose store the seeds in <i>RC-seed bins</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops	1	1	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French bean	Land preparation and sowing		- Sowing of French bean may be done in prepared land. Seed rate for dwarf varieties like Pant Anupam & Arka Komal is 65kg/ha (spacing is 30x45 cm from seed to seed and row to row) and 25-30kg/ha for pole-type (spacing is 60x60cm with 2-3 seeds per hill). - Give light irrigation after 2-3 days of sowing.
Cole crops	Nursery raising		- Nursery for late crops may be raised.
Citrus	For nursery	Leaf Minor Leaf eating caterpillar, thrips & mite.	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @7 g / 15 lit of water.



Manipur Centre, Lamphelpat, Imphal - 795 004





Animal Science	es		
Name of bird/animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as "Meifu"/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		Coccidiosis	Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		Parasitic	Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
Sheep/ Goat All	All age groups	Vaccination	 If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. Take adequate care to prevent occurrence of Mastitis. PPR immunization must be done once in every three years.
		De-worming	Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		Management	 Avoid dampness to protect from Pneumonia. Increase energy feed by 5%.
Pig	All age groups except the young ones	Coccidial infection	• Ofloxacine/ Ornidazole (O ₂) tab twice daily for 5 days.
		De-worming	De-worm with Albendazole @7.5 mg/kg b.wt.
		Vaccination	Vaccinate against FMD and Swine Fever.
		Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
Cattle	All age groups excepts the young ones	Vaccination	 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Cases of H.S. may be encountered during this period Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.
		Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Care & Management	 Mixture of mineral/ salts should be added in the feed. Avoid the cattle from chiting/biting by Flies. Adopt tick control measures
		Mastitis	Adequate care must be ensured for prevention of mastitis for the milch animals.
• Fodder cultiva	tion: Oat crop may be	sown immediately.	

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