

Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6 $^{\rm th}$ to 9 $^{\rm th}$ January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Bishnupur $(11^{th} to \ 15^{th} \ January, \ 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $22-23\,^{\circ}$ C & minimum temp. 5 - $7\,^{\circ}$ C. Relative humidity may reach up to 95 % (max RH) & 34 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops		l .	
Potato	Vegetative		 - Keep soil moist for good growth. - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	 Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.
			- After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i> .
Horticulture Crops			
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



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Cauliflower	Transplantir vegetative	ng to	 Select varieties Candid charm and white shot for late season crop. Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. Apply <i>Chloropyriphos</i> (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. Light watering may be done to maintain soil moisture. 		
Coriander	Vegetative a	and	- Light watering may be done to maintain soil moisture.		
Coriunaci	late sowing		- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended		
			to protect against soil borne diseases.		
Spinach (Palak) Vegetative		- Light watering may be done to maintain soil moisture.		
Animal Science	S				
Name of the anir	nal				
Poultry	All age groups	Care & management	Protect from intense cold. Keep the shed wall covered with hessian cloth during night.		
(Chicken/			Proper ventilation must be provided to protect from moisture inside the shed. Litter		
Turkey/ Duck)			must be kept dry.		
Sheep/ Goat	All age groups	Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.		
excepts the young ones		Vaccination	Vaccinate against sheep/ goat pox and Enterotoxaemia.		
	All age groups	De-worming	De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.		
D! ~	except the	Care and management	Mineral mixture be added in feed @10-20 g/adult animal.		
Pig	young ones		Treat drinking water with potassium permanganate/ sanitizer.		
			Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds		
		Mites infestation	Spray with Skin Heal Spray in sufficient quantity.		
Cattle	All age groups	Deworming	➤ Give Piperazine liquid @ 10-15ml orally once only.		
Cattle	excepts the		➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia,		
	young ones	B.Q./ H.S/FMD	Foot & Mouth Disease, etc.		
		Ectoparasites	Butox@ 2ml/lit of water at forth nightly interval.		
Fishery: Type of Farming					
			- Stocking of fish for next year may be done in ponds having 1.5m water depth @		
Carp/ Catfish	Harvesting and		10,000/ ha.		
culture	stock		- Feeds should be provided @ 3 % body weight per day.		
	maintenance		- Well balanced feed fortified with vitamins and minerals should be provided.		
			- Apply Lime @ 30-35 kg/ha at 30days interval.		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



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Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6^{th} to 9^{th} January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Thoubal $(11^{th}\ to\ 15^{th}\ January,\ 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. 21 – 22 $^{\circ}$ C & minimum temp. 4 - 6 $^{\circ}$ C. Relative humidity may reach up to 94 % (max RH) & 40 % (min RH). The average wind speed may be 3-6 km/hr. Wind direction may be South Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Potato	Vegetative		 - Keep soil moist for good growth. - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		- It may be intercropped with rapeseed/ lentil/ pea Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
			1% in <i>godowns</i> .
Horticulture Crops	•	•	· -
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



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Cauliflower	Transplantin vegetative	ng to	 Select varieties Candid charm and white shot for late season crop. Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. Apply Chloropyriphos (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. Light watering may be done to maintain soil moisture. 		
Coriander	Vegetative a	ind	- Light watering may be done to maintain soil moisture.		
	late sowing		- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended		
			to protect against soil borne diseases.		
Spinach (Palak)	Vegetative		- Light watering may be done to maintain soil moisture.		
Animal Sciences					
Name of the anima	al				
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	Protect from intense cold. Keep the shed wall covered with hessian cloth during night. Proper ventilation must be provided to protect from moisture inside the shed. Litter must be kept dry.		
Sheep/ Goat	All age groups	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.		
	excepts the young ones		Vaccinate against sheep/ goat pox and Enterotoxaemia.		
	All age groups	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.		
Pig	except the	Care and management	➤ Mineral mixture be added in feed @10-20 g/adult animal.		
116	young ones		Treat drinking water with potassium permanganate/ sanitizer.		
			➤ Provide ample ventilation in the shed/dry bedding. Avoid dampness in sheds		
		Mites infestation	> Spray with Skin Heal Spray in sufficient quantity.		
Cattle	All age groups	Deworming	Give Piperazine liquid @ 10-15ml orally once only.		
	excepts the young ones	B.Q./ H.S/FMD	If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.		
young ones		Ectoparasites	Butox@ 2ml/lit of water at forth nightly interval.		
Fishery: Type of Farming	1	zetopulustes	Davide Zhight of water at 191th highly interval		
Carp/ Catfish culture Harvesting and stock maintenance			- Stocking of fish for next year may be done in ponds having 1.5m water depth @ 10,000/ ha.		
			 Feeds should be provided @ 3 % body weight per day. Well balanced feed fortified with vitamins and minerals should be provided. Apply Lime @ 30-35 kg/ha at 30days interval. 		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



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Churachandpur

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Weather forecast for next five days of Churachandpur (11^{th} to 15^{th} January, 2017)

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $22-23\,^{\circ}$ C & minimum temp. $5-6\,^{\circ}$ C. Relative humidity may reach up to 97 % (max RH) & 37 % (min RH). The average wind speed may be 4 km/hr. Wind direction may be South Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	•		
Potato	Vegetative		 Keep soil moist for good growth. If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



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Cauliflower Coriander		Transplantir vegetative Vegetative a late sowing				 - Select varieties Candid charm and white shot for late season crop. - Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. - Apply <i>Chloropyriphos</i> (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. - Light watering may be done to maintain soil moisture. - Light watering may be done to maintain soil moisture. - For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended to protect against soil borne diseases.
Spinach (Palak)		Vegetative				- Light watering may be done to maintain soil moisture.
Animal Sciences						
Name of the anin	_				,	
Poultry (Chicken/ Turkey/ Duck)	Al	All age groups		Prop	ect from intense cold. Keep the shed wall covered with hessian cloth during night, per ventilation must be provided to protect from moisture inside the shed. Litter t be kept dry.	
Sheep/ Goat	All age groups		Deworming		Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.	
		cepts the oung ones	Vaccination		vac	cinate against sheep/ goat pox and Enterotoxaemia.
		All age groups De-worming		_		De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig	except the young ones Care and management		>	Mineral mixture be added in feed @10-20 g/adult animal. Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds		
			Mites	infestation		Spray with Skin Heal Spray in sufficient quantity.
Cattle		ll age groups	Dewo	rming		Give Piperazine liquid @ 10-15ml orally once only.
Cattle		cepts the oung ones		H.S/FMD		If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.
	Ectoparasites		Buto	ox@ 2ml/lit of water at forth nightly interval.		
Fishery: Type of Farming						
Carp/ Catfish culture	stoc	vesting and k ntenance			10,0 - Fee	ocking of fish for next year may be done in ponds having 1.5m water depth @ 1000/ ha. eds should be provided @ 3 % body weight per day. ell balanced feed fortified with vitamins and minerals should be provided.
					oply Lime @ 30-35 kg/ha at 30days interval.	

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MANIPUR BULLETIN 10th January, 2017

Senapati

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Weather forecast for next five days of Senapati $(11^{th} \ to \ 15^{th} \ January, 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $21-23\,^{\circ}$ C & minimum temp. $4-6\,^{\circ}$ C. Relative humidity may reach up to 95 % (max RH) & 29 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be North East Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Potato	Vegetative		 Keep soil moist for good growth. If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in <i>godowns</i>.
Horticulture Crops			170 III godowns .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



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"Gramin Krishi Mausam Seva"

Cauliflower		Transplantin vegetative				- Select varieties Candid charm and white shot for late season crop Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days Apply <i>Chloropyriphos</i> (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms Light watering may be done to maintain soil moisture.		
		late sowing				- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended to protect against soil borne diseases.		
Spinach (Palak))	Vegetative				- Light watering may be done to maintain soil moisture.		
Animal Sciences								
Name of the anin	nal							
Poultry (Chicken/ Turkey/ Duck)	Al	All age groups		& management	Prop	Protect from intense cold. Keep the shed wall covered with hessian cloth during night. Proper ventilation must be provided to protect from moisture inside the shed. Litter must be kept dry.		
Sheep/ Goat		l age groups	Deworming		➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.			
		cepts the ung ones	Vaccination		Vac	cinate against sheep/ goat pox and Enterotoxaemia.		
D.		All age groups De-worming		orming and management		De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral mixture be added in feed @10-20 g/adult animal.		
Pig		oung ones			>	 Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds 		
				infestation		Spray with Skin Heal Spray in sufficient quantity.		
Cattle		l age groups	Dewo	rming		Give Piperazine liquid @ 10-15ml orally once only.		
Cuttie	excepts the young ones			B.Q./ H.S/FMD		If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.		
	Ectoparasites		Buto	ox@ 2ml/lit of water at forth nightly interval.				
Fishery: Type of Farming								
Carp/ Catfish culture	stoc	vesting and k ntenance			10,0 - Fee - We	ocking of fish for next year may be done in ponds having 1.5m water depth @ 000/ ha. eds should be provided @ 3 % body weight per day. ell balanced feed fortified with vitamins and minerals should be provided. oply Lime @ 30-35 kg/ha at 30days interval.		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6 $^{\rm th}$ to 9 $^{\rm th}$ January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Tamenglong (11th to 15th January, 2017)

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $23-24\,^{\circ}$ C & minimum temp. 6 - $8\,^{\circ}$ C. Relative humidity may reach up to 93 % (max RH) & 26 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be North East Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			•
Potato	Vegetative		 - Keep soil moist for good growth. - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



Manipur Centre, Lamphelpat, Imphal - 795 004





Cauliflower	Transplai vegetativ			- 6 8 - i	- Select varieties Candid charm and white shot for late season crop Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days Apply <i>Chloropyriphos</i> (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms Light watering may be done to maintain soil moisture.
Coriander	Vegetativ	e and			Light watering may be done to maintain soil moisture.
0011411401	late sowi				- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended
		Ü			to protect against soil borne diseases.
Spinach (Palak)	Vegetativ	e		-	- Light watering may be done to maintain soil moisture.
Animal Sciences	3				
Name of the anin	nal				
Poultry (Chicken/ Turkey/ Duck)	All age group	All age groups Care & management		Proper	et from intense cold. Keep the shed wall covered with hessian cloth during night. To ventilation must be provided to protect from moisture inside the shed. Litter the kept dry.
Sheep/ Goat			Deworming		se Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with alf the dose at regular interval of 3 weeks.
			Vaccination		nate against sheep/ goat pox and Enterotoxaemia.
	All age groups except the young ones De-worming Care and management			m	e-worming of animals should be done using Abendazole/ Levamisole @7.5 g/kg b.wt. or Ivermectin @50mg/kg b. wt.
Pig			rT ≺	lineral mixture be added in feed @10-20 g/adult animal. reat drinking water with potassium permanganate/ sanitizer. rovide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
		Mites	infestation		pray with Skin Heal Spray in sufficient quantity.
Cattle	All age group	s Dewo	orming		ive Piperazine liquid @ 10-15ml orally once only.
Cattle	excepts the young ones	B.Q./	H.S/FMD		not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, oot & Mouth Disease, etc.
	Ectoparasites		arasites	Butox	@ 2ml/lit of water at forth nightly interval.
Fishery: Type of Farming					
Carp/ Catfish culture	Harvesting and stock			10,000 - Feed	s should be provided @ 3 % body weight per day.
	maintenance				balanced feed fortified with vitamins and minerals should be provided. Lime @ 30-35 kg/ha at 30days interval.

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6^{th} to 9^{th} January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Thoubal $(11^{th}\ to\ 15^{th}\ January,\ 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $21-23\,^{\circ}$ C & minimum temp. 5 - $7\,^{\circ}$ C. Relative humidity may reach up to 97 % (max RH) & 35 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	•		
Potato	Vegetative		 Keep soil moist for good growth. If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



Manipur Centre, Lamphelpat, Imphal - 795 004





Cauliflower	Transplantin vegetative	ng to	 Select varieties Candid charm and white shot for late season crop. Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. Apply Chloropyriphos (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. Light watering may be done to maintain soil moisture. 		
Coriander	Vegetative a	ind	- Light watering may be done to maintain soil moisture.		
	late sowing		- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended		
			to protect against soil borne diseases.		
Spinach (Palak)	Vegetative		- Light watering may be done to maintain soil moisture.		
Animal Sciences					
Name of the anima	al				
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	Protect from intense cold. Keep the shed wall covered with hessian cloth during night. Proper ventilation must be provided to protect from moisture inside the shed. Litter must be kept dry.		
Sheep/ Goat	All age groups	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.		
	excepts the young ones		Vaccinate against sheep/ goat pox and Enterotoxaemia.		
	All age groups	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.		
Pig	except the	Care and management	➤ Mineral mixture be added in feed @10-20 g/adult animal.		
116	young ones		Treat drinking water with potassium permanganate/ sanitizer.		
			➤ Provide ample ventilation in the shed/dry bedding. Avoid dampness in sheds		
		Mites infestation	> Spray with Skin Heal Spray in sufficient quantity.		
Cattle	All age groups	Deworming	Give Piperazine liquid @ 10-15ml orally once only.		
	excepts the young ones	B.Q./ H.S/FMD	If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.		
young ones		Ectoparasites	Butox@ 2ml/lit of water at forth nightly interval.		
Fishery: Type of Farming	1	zetopulustes	Davide Zhight of water at 191th highly interval		
Carp/ Catfish culture Harvesting and stock maintenance			- Stocking of fish for next year may be done in ponds having 1.5m water depth @ 10,000/ ha.		
			 Feeds should be provided @ 3 % body weight per day. Well balanced feed fortified with vitamins and minerals should be provided. Apply Lime @ 30-35 kg/ha at 30days interval. 		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Ukhrul $(11^{th}\ to\ 15^{th}\ January,\ 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. 20 - 22 $^{\circ}$ C & minimum temp. 3 - 5 $^{\circ}$ C. Relative humidity may reach up to 95 % (max RH) & 26 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be South Westerly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	•		
Potato	Vegetative		 Keep soil moist for good growth. If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



Manipur Centre, Lamphelpat, Imphal - 795 004





Cauliflower	Transplantin vegetative	ng to	 Select varieties Candid charm and white shot for late season crop. Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. Apply Chloropyriphos (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. Light watering may be done to maintain soil moisture. 		
Coriander	Coriander Vegetative and late sowing		Light watering may be done to maintain soil moisture. For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended to protect against soil borne diseases.		
Spinach (Palak)	Vegetative		- Light watering may be done to maintain soil moisture.		
Animal Sciences					
Name of the anim		1	<u>'</u>		
Poultry (Chicken/ Turkey/ Duck)	oultry All age groups Chicken/		Protect from intense cold. Keep the shed wall covered with hessian cloth during night. Proper ventilation must be provided to protect from moisture inside the shed. Litter must be kept dry.		
Sheep/ Goat	All age groups excepts the young ones	Deworming Vaccination	 Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks. Vaccinate against sheep/ goat pox and Enterotoxaemia. 		
Pig	All age groups except the young ones	De-worming Care and management	 De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt. Mineral mixture be added in feed @10-20 g/adult animal. Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds 		
Cattle	All age groups excepts the young ones	Mites infestation Deworming B.Q./ H.S/FMD Ectoparasites	 Spray with Skin Heal Spray in sufficient quantity. Give Piperazine liquid @ 10-15ml orally once only. If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaem Foot & Mouth Disease, etc. Butox@ 2ml/lit of water at forth nightly interval. 		
Fishery: Type of Farming	•	<u>r</u>	1		
Carp/ Catfish culture	Harvesting and stock maintenance		- Stocking of fish for next year may be done in ponds having 1.5m water depth @ 10,000/ ha Feeds should be provided @ 3 % body weight per day Well balanced feed fortified with vitamins and minerals should be provided.		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.

- Apply Lime @ 30-35 kg/ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Imphal East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6^{th} to 9^{th} January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Imphal East $(11^{th}$ to 15^{th} January, 2017)

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $22-23\,^{\circ}$ C & minimum temp. 5 - $6\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 30 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be North Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Potato	Vegetative		 Keep soil moist for good growth. If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



Manipur Centre, Lamphelpat, Imphal - 795 004





Cauliflower		Transplantin vegetative				 - Select varieties Candid charm and white shot for late season crop. - Apply Tracel @ 300gm/ sangam in 30-35days old (after transplanting) cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days. - Apply <i>Chloropyriphos</i> (1.5%) dust @25 kg /ha to the cauliflower/ cabbage infested by cut-worms. - Light watering may be done to maintain soil moisture. 		
Coriander		Vegetative a	ınd			- Light watering may be done to maintain soil moisture.		
		late sowing				- For late, treat seed with Trichoderma harzianum @ 4g/kg seed is recommended		
Crimach (Dalak		Vegetative				to protect against soil borne diseases. - Light watering may be done to maintain soil moisture.		
Spinach (Palak)		vegetative				- Light watering may be done to maintain son moisture.		
Animal Sciences								
Name of the animal Poultry All age groups Care (Chicken/ Turkey/ Duck)		Care &	& management	Prop	ect from intense cold. Keep the shed wall covered with hessian cloth during night. Der ventilation must be provided to protect from moisture inside the shed. Litter t be kept dry.			
Sheep/ Goat	Sheep/ Goat All age groups D		Deworming		> Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.			
			Vacci	accination		cinate against sheep/ goat pox and Enterotoxaemia.		
	All age groups		De-worming			De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.		
Pig except the young ones		Care and management		>	 Mineral mixture be added in feed @10-20 g/adult animal. Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds 			
			Mites infestation		Spray with Skin Heal Spray in sufficient quantity.			
Cattle		All age groups excepts the young ones		Deworming		➤ Give Piperazine liquid @ 10-15ml orally once only.		
Cattic				B.Q./ H.S/FMD		➤ If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.		
Ectoparasites		Buto	ox@ 2ml/lit of water at forth nightly interval.					
Fishery: Type of Farming								
Carp/ Catfish culture	stocl	vesting and contents and attenuance			10,0 - Fee - We	ocking of fish for next year may be done in ponds having 1.5m water depth @ 000/ ha. eds should be provided @ 3 % body weight per day. ell balanced feed fortified with vitamins and minerals should be provided. oply Lime @ 30-35 kg/ha at 30days interval.		

SMS:

Lakliba Nongmaijing faobada nong leite. Aluda cut worm ngakthoknaba charu 1kg + 40g Chini + 5g Trichlorfon da ishing happaga totlaga pambigi makhong manakta thambiyu. Hangamda wahik ngakthoknaba 3sq.m khudingda yellow plate thambiyu natraga ishing 1 litre da 2ml Pyrethrum happaga kappiyu.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 10th January, 2017

Imphal West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th January, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (6^{th} to 9^{th} January, 2017)

Observed mainly clear and foggy sky during morning hours of 7^{th} Jan, 2017 sky and no rainfall in past three days. Maximum temperature range of 22.3 to 22.8 °C and a rise in Minimum temperature from 6.5 to 7.8 °C with mean relative humidity 90.7 % max and 44.5 % min was recorded in the past three days. The average wind speed range remained 3.4 to 4.3 km/hr.

Weather forecast for next five days of Imphal West $(11^{th}\ to\ 15^{th}\ January,\ 2017)$

Likely to have no rain upto Sunday. Weather is most likely to remain dry. Mainly clear to partly cloudy sky with maximum temp. $21-23\,^{\circ}$ C & minimum temp. $4-6\,^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 30 % (min RH). The average wind speed may be 3-5 km/hr. Wind direction may be North Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Potato	Vegetative		 - Keep soil moist for good growth. - If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water.
		Early Blight	- Spray Mencozeb at 7-10 days interval against early blight.
Rapeseed/ Mustard	Vegetative to flowering		 Regular monitoring of moisture of soil may be done to ensure good growth. Irrigation may be given if the soil moisture have decline. If flowering has started, then four bee boxes may be kept for one hectare crop area. Avoid spray of insecticides in such area.
		Aphid	- Use yellow plates for every 3 sq.m to attract the aphids or spray Pyrethrum @ 2ml/ litre of water on the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water on the infected patches only .
Pulses	Vegetative and late sowing		- Give light irrigation to pea and lentil just to keep soil moist during vegetative stage.
		Rust or Powdery mildew	- Spray Propiconazole @ 15ml/ 15 litre water.
		Aphid	- Spray Imidachloprid 17.8 SL @ 7-10ml/ 15 litre of water against aphid.
Rabi maize	Sowing		 It may be intercropped with rapeseed/ lentil/ pea. Treat seed with Mencozeb @ 2g/ kg of seeds and shade dry for 30 min then sowing may be done.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion
Horticulture Crops			1% in <i>godowns</i> .
Cucurbits	Nursery raising		- Prepare for raising nursery of cucurbits in poly-pouch and trays under low cost poly-house or naturally ventilated polyhouse.
Rabi Vegetable (cole crops)	Vegetative		- If there is incidence of leaf eating caterpillar, spray Flubendiamide (Fame) @ 2ml/ 10 lit of water. Spray Imidachloprid 17.8SL @5ml/10 litres of water on 20days old seedlings as prophylactic spray.
Tomato	Transplanting and vegetative		- Avoid transplanting of tomato in the bed/ plots where chilli/ brinjal were previously grown. It is better to plant it where the previous crop was rice, maize, etc. to avoid bacterial wilt.
Garden pea/ Broad	Vegetative		- Light watering may be done to maintain soil moisture.
bean		powdery mildew and yellow rust	- Spray Bayleton @ 7 g/ 10 litres of water against powdery mildew and yellow rust especially to the crops grown in moist/ shady area.
Onion	Vegetative		 - 45-60 days old onion seedlings may be transplanted. - Give light irrigation during morning and evening hours till the plant get established.



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Coriander		Vegetative a	ınd			- Light watering may be done to maintain soil moisture.		
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						to protect against soil borne diseases.		
Spinach (Palak))	Vegetative				- Light watering may be done to maintain soil moisture.		
Animal Sciences	S							
Name of the anin	nal							
Poultry (Chicken/ Turkey/ Duck)	ken/		Prop	Protect from intense cold. Keep the shed wall covered with hessian cloth during night. Proper ventilation must be provided to protect from moisture inside the shed. Litter must be kept dry.				
Sheep/ Goat		All age groups		Deworming		➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.		
excepts the young ones		-	Vaccination			cinate against sheep/ goat pox and Enterotoxaemia.		
Pig All age groups except the young ones		De-worming			De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.			
		•	Care and management		>	Mineral mixture be added in feed @10-20 g/adult animal. Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds		
			Mites	infestation		Spray with Skin Heal Spray in sufficient quantity.		
C-441-	Al	All age groups excepts the young ones		Deworming		➤ Give Piperazine liquid @ 10-15ml orally once only.		
Cattle				B.Q./ H.S/FMD		If not vaccinated, give vaccine for Black Quarter now, Haemorrhagic septicaemia, Foot & Mouth Disease, etc.		
				Ectoparasites		ox@ 2ml/lit of water at forth nightly interval.		
Fishery: Type of Farming								
Carp/ Catfish culture	stocl	Harvesting and stock maintenance			10,0 - Fe	ocking of fish for next year may be done in ponds having 1.5m water depth @ 000/ ha. eds should be provided @ 3 % body weight per day.		
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