

Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 26th May, 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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\rm o}$ C and minimum temperature range of 20.0 to 21.3 $^{\rm o}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7-6.1 km/hr.

Weather forecast for next five days of Bishnupur (27th to 31st May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 79 % (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
•	Panicle initiation (Pre-kharif rice)		 Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)	worm	 - Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg/ha for transplanting of rice. - Soak seeds and incubate before sowing. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Soybean	Sowing to vegetative		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
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. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per
	TT		pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drinki		nd animals.	
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		De-worming	De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
	All age groups	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
Pig	except the young ones	Mineral feeding	➤ Provide mineral mixture.
	ones	Care and	Provide clean water (drinking).
		management	Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 26th May, 2017

Chandel

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Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\rm o}$ C and minimum temperature range of 20.0 to 21.3 $^{\rm o}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7 – 6.1 km/hr.

Weather forecast for next five days of Chandel (27th to 31st May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 21 - 33 $^{\circ}$ C & minimum temp. 21 - 22 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 87 % (min RH). The average wind speed may be 2 - 3 km/hr.

Field Crops	T	_	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Panicle initiation (Pre-kharif rice)	1.6611	 - Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complet removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)	worm	 - Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg/ha for transplanting of rice. - Soak seeds and incubate before sowing. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Soybean	Sowing to vegetative		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
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 of weight of seeds. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rail protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drinki			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
	Silves	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	All age groups except the young	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
	ones	Mineral feeding	> Provide mineral mixture.
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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Churachandpur

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Weather forecast for next five days of Churachandpur $(27^{th}$ to 31^{st} May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 20 - 22 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 75 % (min RH). The average wind speed may be 2 - 3 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
•	Panicle initiation		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
			- If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete
			removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested
Rice		worm	drain out the field immediately when possible.
Rice	Nursery (Main		- Prepare community nursery in upland area/ terrace of 700m ² of land is for a
	kharif rice)		hectare. Seed rate is $40 - 60 \text{ Kg}$ /ha for transplanting of rice.
			- Soak seeds and incubate before sowing.
			- Maintain 2-3cm water level initially and drain out drain out completely before
			sowing. Increase water level to just submerge soil surface and expose the green
			aerial sprout after sowing.
Soybean	Sowing to		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44
	vegetative		kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing. Seed
			rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam.
			- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with
			Thiram.
			- Avoid weeds in crop field.
Groundnut	Sowing to		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75
	vegetative		may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of
			urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing.
			- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed o
			with Thiram.
			- Avoid weeds in crop field.
	Sowing to		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal
Kharif Maize	vegetative		application during final ploughing or at the time of sowing. For high altitude
IXIIai II IViaize			spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
			- Avoid weeds in crop field.
Blackgram &	Sowing to		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains.
Rice bean	vegetative		Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
			- Avoid weeds in crop field.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after prope
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content of
Seeds storage	management		weight of seeds.
			- 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain
			protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60
			cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As
			prophylactic measure against termite/ ants or other soil borne disease, Furadan 3



Manipur Centre, Lamphelpat, Imphal - 795 004





			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per
			pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drink			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		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	All age groups except the young	Swine Fever FMD	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months Vaccinate against FMD after the age of 3 months.
	ones	Mineral feeding	Provide mineral mixture.
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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Senapati

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Weather forecast for next five days of Senapati (27th to 31st May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 22 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 68 % (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
•	Panicle initiation (Pre-kharif rice)		 Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
D.		Leaf folder and case worm	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)		 - Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg/ha for transplanting of rice. - Soak seeds and incubate before sowing. - Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Soybean	Sowing to vegetative		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
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 of weight of seeds. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3.



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drink			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			- Bleaching powder may be spread near farm premises To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
n.	All age groups	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
Pig	except the young ones	Mineral feeding	Provide mineral mixture.
	ones	Care and	Provide clean water (drinking).
		management	Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



Manipur Centre, Lamphelpat, Imphal - 795 004





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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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\circ}$ C and minimum temperature range of 20.0 to 21.3 $^{\circ}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7-6.1 km/hr.

Weather forecast for next five days of Tamenglong $(27^{th} to 31^{st} May, 2017)$

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 22 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 75 % (min RH). The average wind speed may be 2 - 3 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
-	Panicle initiation		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
			- If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete
			removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested
Rice		worm	drain out the field immediately when possible.
Rice	Nursery (Main		- Prepare community nursery in upland area/ terrace of 700m ² of land is for a
	kharif rice)		hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice.
			- Soak seeds and incubate before sowing.
			- Maintain 2-3cm water level initially and drain out drain out completely before
			sowing. Increase water level to just submerge soil surface and expose the green
			aerial sprout after sowing.
Soybean	Sowing to		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44
	vegetative		kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing. Seed
			rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam.
			- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with
			Thiram.
			- Avoid weeds in crop field.
Groundnut	Sowing to		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75
	vegetative		may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of
			urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing.
			- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed o
			with Thiram.
			- Avoid weeds in crop field.
	Sowing to		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal
Kharif Maize	vegetative		application during final ploughing or at the time of sowing. For high altitude
IXIIai II IViaize			spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
			- Avoid weeds in crop field.
Blackgram &	Sowing to		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains.
Rice bean	vegetative		Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
			- Avoid weeds in crop field.
· · · · · · · · · · · · · · · · · · ·			- For seed purpose dry, clean and store the seeds in RC-seed bins after prope
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content of
Seeds storage	management		weight of seeds.
_			- 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain
			protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60
Tree beam			cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a
			prophylactic measure against termite/ ants or other soil borne disease, Furadan 3



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		 In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drink			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		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	All age groups except the young	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
	ones	Mineral feeding	> Provide mineral mixture.
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\rm o}$ C and minimum temperature range of 20.0 to 21.3 $^{\rm o}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7 – 6.1 km/hr.

Weather forecast for next five days of Thoubal (27th to 31st May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 26 - 33 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 100 % (max RH) & 86 % (min RH). The average wind speed may be 2 - 4 km/hr.

prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Panicle initiation (Pre-kharif rice)	Leaf folder and case	 Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing. Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)	worm	 Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg/ha for transplanting of rice. Soak seeds and incubate before sowing. Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Soybean	Sowing to vegetative		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after propedrying of seeds along with charcoal at 80:20. Check for moisture content of weight of seeds. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drink			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			- Bleaching powder may be spread near farm premises To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
n.	All age groups	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
Pig	except the young ones	Mineral feeding	Provide mineral mixture.
	ones	Care and	Provide clean water (drinking).
		management	Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\circ}$ C and minimum temperature range of 20.0 to 21.3 $^{\circ}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7-6.1 km/hr.

Weather forecast for next five days of Ukhrul $(27^{th} to 31^{st} May, 2017)$

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 22 - 23 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 35 % (min RH). The average wind speed may be 2 km/hr.

Field Crops		T	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Panicle initiation		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
			- If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete
		7 0011	removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested
Rice		worm	drain out the field immediately when possible.
	Nursery (Main		- Prepare community nursery in upland area/ terrace of 700m² of land is for a
	kharif rice)		hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice.
			- Soak seeds and incubate before sowing.
			- Maintain 2-3cm water level initially and drain out drain out completely before
			sowing. Increase water level to just submerge soil surface and expose the green
			aerial sprout after sowing.
Soybean	Sowing to		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44
	vegetative		kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing. Seed
			rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam.
			- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with
			Thiram.
			- Avoid weeds in crop field.
Groundnut	Sowing to		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75
	vegetative		may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of
			urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal
			application during final ploughing or incorporated at the time of sowing.
			- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or
			with Thiram.
			- Avoid weeds in crop field.
	Sowing to		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal
Kharif Maize	vegetative		application during final ploughing or at the time of sowing. For high altitude
Kliai ii Maize			spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
			- Avoid weeds in crop field.
Blackgram &	Sowing to		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains.
Rice bean	vegetative		Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
			- Avoid weeds in crop field.
<u> </u>			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of seeds.
Ü			- 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain
			protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60
			cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a
			prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		 In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drink			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
		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	All age groups except the young	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
	ones	Mineral feeding	> Provide mineral mixture.
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



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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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\circ}$ C and minimum temperature range of 20.0 to 21.3 $^{\circ}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7-6.1 km/hr.

Weather forecast for next five days of Imphal East $(27^{th}$ to 31^{st} May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 20 - 21 $^{\circ}$ C. Relative humidity may reach up to 100 % (max RH) & 78 % (min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
,	Panicle initiation (Pre-kharif rice)		 Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)	worm	 Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. Soak seeds and incubate before sowing. Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.
Soybean	Sowing to vegetative		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
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 of weight of seeds. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3.



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
* Provide clean drinki			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
• ,			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
	Silves	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	All age groups except the young	Swine Fever FMD Mineral feeding	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months Vaccinate against FMD after the age of 3 months. ➤ Provide mineral mixture.
	ones		
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 26th May, 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 27th to 31st May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (23rd to 25th May, 2017)

Observed mainly cloudy during morning hours of $23^{\rm rd}$ then partly cloudy to mainly clear sky thereafter and **4.3 mm** rainfall was recorded during past three days. Maximum temperature range of 29.2 to 31.8 $^{\circ}$ C and minimum temperature range of 20.0 to 21.3 $^{\circ}$ C with mean relative humidity 81.3 % max and 60.7 % min was recorded in the past four days. Average wind speed range is 4.7-6.1 km/hr.

Weather forecast for next five days of Imphal West $(27^{th}$ to 31^{st} May, 2017)

Likely to have light rainfall over Manipur with mainly clear sky upto Sunday then mainly cloudy thereafter and maximum temp. 28 - 33 $^{\circ}$ C & minimum temp. 20 - 21 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 70 % (min RH). The average wind speed may be 2 - 4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Nume of the crop	Panicle initiation (Pre-kharif rice)		 Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm	Apply Lambdacyhothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately when possible.
Rice	Nursery (Main kharif rice)	worm	 Prepare community nursery in upland area/ terrace of 700m² of land is for a hectare. Seed rate is 40 – 60 Kg/ha for transplanting of rice. Soak seeds and incubate before sowing. Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green
Soybean	Sowing to vegetative		aerial sprout after sowing. Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram. - Avoid weeds in crop field.
Groundnut	Sowing to vegetative		Seed rate of 100-110 kg of Kernal/ha of the recommended varieties are ICGS-75 may be sown at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram. - Avoid weeds in crop field.
Kharif Maize	Sowing to vegetative		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm. - Avoid weeds in crop field.
Blackgram & Rice bean	Sowing to vegetative		Seed rate of 10-15 kg/ ha may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds. - Avoid weeds in crop field.
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. 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
Cauliflower	Nursery		- Preparation of nursery for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-



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			G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric/ Ginger	Vegetative		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting Weeding may be done to avoid insect pest infestation.
Chilli/ capsicum	Vegetative to flowering		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains Weeding may be done to avoid insect pest infestation.
Animal Sciences			
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Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/ Turkey/ Duck)		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.
• ,			 Bleaching powder may be spread near farm premises. To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Sheep should be sheared during this month.
	01103	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	All age groups except the young	Swine Fever FMD	 SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months. Vaccinate against FMD after the age of 3 months.
	ones	Mineral feeding	➤ Provide mineral mixture.
		Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
Cattle	All age groups excepts the young ones	Management & heat related disease	 Provide enough water. Take up measures to protect against fever, dehydration, loss of appetite, body salt decrease. Add appropriate quantity of salt mixture in water and feed. Deworming may be done using appropriate agent against Oesophagostum.