

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Ukhrul

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (27th to 30th July, 2018)

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** °C and minimum of **21.7** to **22.7** °C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/hr.

Weather forecast for next five days of Ukhrul (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 26-27 °C & minimum temp. 20-21 °C. Relative humidity may reach upto 100 % (max RH) & 93 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering	1 est and disease	- Maintain water level to 5-8cm and drain out excess water if accumulated due to
Rice	(Kharif rice)		heavy rain.
	(Kilai ii Ticc)		- If the crop is in tillering stage, after rains weeding may be done manually or by
			using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf	- Spray Lambdacyhothrin @ 15 ml/ pump.
		folder	- Spray Lambuacynoun in @ 13 m/ pump.
Kharif Maize	cob formation to		- Maintain proper drainage system to avoid water logging due to heavy rains.
	maturity		- After rains weeding may be done to control insect pest population in the crop
			fields.
Soybean/	Flowering to		- Hand weeding should be done after rains to avoid hairy caterpillar. Also,
Groundnut	fruiting		earthing-up and thinning may be done after rains. Avoid earthing up after 40
01000000			days of sowing in groundnut.
			- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or
			spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice	Vegetative to		- Hand weeding should be done after rains if the weed population is high.
Bean	Flowering		- Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage			For seed purpose store the seeds in RC-Seed Bin after proper drying and
500105	Post-harvest		cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for
	management		moisture content or weight of charcoal and dry if required.
			For grains, store grains in well ventilated godowns after drying properly. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops		-	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage	Plutella Diamond	- Check for infestation of Plutella Diamond black moth in young plants. If the
	of early crop and	black moth	plant is young then hand picking is advised otherwise neem based pesticides may
	nursery of main		be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on
			the main trunk up to 5 ft height from the ground.
			- The soil of the basin area should be earthed. Trichoderma & Pseudomonas
			formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be
			mixed in to the soil.
			- For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g
			SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @
	blight		2gm/lit water 14 days interval at least twice.
Citrus			- Prune the disease infected twigs and burn them outside the farm area.
			- Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a
			spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for
			dwarf varieties.
			Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one







				sucker (with broad base & narrow leaves) per pit.	
	Old Plantat	ion		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants	
				per pit is required.	
				- Care must be taken to avoid wilting disease in banana grown in same pit in	
				poor drained area for more than 5-6 years.	
Turmeric	Rhizome	Soft rot in Rhizome	n ginger and	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @	
	formation	turmeric	rot iii	2g/lit water at 14 days interval.	
Animal Science	205	turneric			
		rds and animals Dr	ainage may	be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/	Stage	Disease		Agro-meteorological advisories	
animal	Suge	Manage		Tigito inecesi ological actibolics	
Poultry	All age groups	Fungal Toxii		Avoid consumption of feed with fungal growth.	
(Chicken/ Duck)		• Deworming		Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.	
		Management	•	Do not allow to consume muddy water to protect from E.coli infection. Use	
GI / G ·	A 11			water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis	3	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.	
		Management		• Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young	De-worming Vaccination		Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.	
	ones			Vaccinate against FMD.	
		Management	t	Protect from thunder showers especially during night.	
Cattle	All age groups • Vaccination		-	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.	
	excepts the young ones			• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Man	agement	Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.	
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery				• • • •	
	with happa net or re	aise the pond dyke	height to ave	pid escape of fishes.	
Type of Farming	Stage	Management		trological advisories	
Carp culture	Nurseries/ grow-	Pond and water	Maintain	minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$.	
T	out		Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh clean with high oxygen content.		
		Feed	Provide fe	eed 2-3 times @ 5-10% body weight per day.	
				ood feed having 30% crude protein fortified with vitamins and mineral.	
		Fish	For semi-	intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond.	
				- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting.	
	Brooder	Pond water and feed		minimum depth of 2.0-2.2 m. Maintain good quality water. eed @ 3-5 % body weight per day.	
	Breeding	Hormone	Fish horn	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Imphal West

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

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Weather forecast for next five days of Imphal West (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 28-30 °C & minimum temp. 22-23 °C. Relative humidity may reach upto 100 % (max RH) & 97 % (min RH). The average wind speed may be 2 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering	1 est and disease	- Maintain water level to 5-8cm and drain out excess water if accumulated due to
Rice	(Kharif rice)		heavy rain.
	(Kilai ii Ticc)		- If the crop is in tillering stage, after rains weeding may be done manually or by
			using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf	- Spray Lambdacyhothrin @ 15 ml/ pump.
		folder	- Spray Lambuacynounini @ 13 mi/ pump.
Kharif Maize	cob formation to		- Maintain proper drainage system to avoid water logging due to heavy rains.
	maturity		- After rains weeding may be done to control insect pest population in the crop
			fields.
Soybean/	Flowering to		- Hand weeding should be done after rains to avoid hairy caterpillar. Also,
Groundnut	fruiting		earthing-up and thinning may be done after rains. Avoid earthing up after 40
01001101101			days of sowing in groundnut.
			- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or
			spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice	Vegetative to		- Hand weeding should be done after rains if the weed population is high.
Bean	Flowering		- Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage			For seed purpose store the seeds in RC-Seed Bin after proper drying and
500105	Post-harvest		cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for
	management		moisture content or weight of charcoal and dry if required.
			For grains, store grains in well ventilated godowns after drying properly. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops		-	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage	Plutella Diamond	- Check for infestation of Plutella Diamond black moth in young plants. If the
	of early crop and	black moth	plant is young then hand picking is advised otherwise neem based pesticides may
	nursery of main		be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on
			the main trunk up to 5 ft height from the ground.
			- The soil of the basin area should be earthed. Trichoderma & Pseudomonas
			formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be
			mixed in to the soil.
			- For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g
			SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @
	blight		2gm/lit water 14 days interval at least twice.
Citrus			- Prune the disease infected twigs and burn them outside the farm area.
			- Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a
			spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for
			dwarf varieties.
			Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one

• Management

• Vaccination

• Deworming



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





			sucker (with broad base & narrow leaves) per pit.
	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants
			per pit is required.
			- Care must be taken to avoid wilting disease in banana grown in same pit in
			poor drained area for more than 5-6 years.
Turmeric	Rhizome	Soft rot in ginger and	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @
	formation	Rhizome rot in	2g/lit water at 14 days interval.
		turmeric	
A minu al Caiamaga			

Animal Sciences

Name of bird/	Stage	Disease and	Agro-meteorological advisories
animal		Management	
Poultry	All age groups	Fungal Toxin	Avoid consumption of feed with fungal growth.
(Chicken/		Deworming	Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for
Duck)			100 birds in drinking water. Again give half of the dose on second day.

water sanitizer.

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Sheep/ Goat	All age groups	Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Management	Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups	De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per

except the young ones adult animal once.

• Vaccination • Vaccinate against FMD.

• Management • Protect from thunder showers especially during night.

Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
 Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
 De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-

• Do not allow to consume muddy water to protect from E.coli infection. Use

30ml for 100 kg body weight.
 Care & Management
 Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.

• Milk fever • Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

Cattle

All age groups

ones

excepts the young

Fishery			
* Encircle pond	d with happa net or r	aise the pond dyke l	height to avoid escape of fishes.
Type of	Stage	Management	Agro-metrological advisories
Farming			
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$.
	out		Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and
			clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond.
			- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30%
			bottom feeder. Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water.
		feed	Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5
			<i>ml/kg</i> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.



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"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Bishnupur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

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Weather forecast for next five days of Bishnupur (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 29-31 °C & minimum temp. 23-24 °C. Relative humidity may reach upto 100 % (max RH) & 88 % (min RH). The average wind speed may be 0-2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Kharif rice)		 Maintain water level to 5-8cm and drain out excess water if accumulated due to heavy rain. If the crop is in tillering stage, after rains weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to maturity		Maintain proper drainage system to avoid water logging due to heavy rains. After rains weeding may be done to control insect pest population in the crop fields.
Soybean/ Groundnut	Flowering to fruiting		 - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Vegetative to Flowering		 - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			Maratinon 170 on the wans of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Plutella Diamond black moth	 Check for infestation of Plutella Diamond black moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed. Raise main crop cauliflower nursery.
Tree bean	Grown up trees		 Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on the main trunk up to 5 ft height from the ground. The soil of the basin area should be earthed. Trichoderma & Pseudomonas formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be mixed in to the soil. For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf blight		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @ 2gm/lit water 14 days interval at least twice.
Citrus		Greening	 Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease. Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation	Greening	 Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one



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				sucker (with broad base & narrow leaves) per pit.
	Old Plantation	on		 Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.
Turmeric	Rhizome formation	Soft rot in Rhizome i turmeric	ginger and rot in	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
Animal Science				
				be constructed well around the birds or animals sheds to avoid water logging.
Name of bird/ animal	Stage	Disease Manager	ment	Agro-meteorological advisories
Poultry	All age groups	Fungal Toxir	1	Avoid consumption of feed with fungal growth.
(Chicken/ Duck)		Deworming		• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		Management		• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
Sheep/ Goat All age groups		Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		Fascioliosis Management		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
				• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young			• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
	ones	Vaccination		Vaccinate against FMD.
		Management		Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	Vaccination		 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Mana	agement	Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.
Fishery				r
	l with happa net or ra	ise the pond dyke l	height to avo	pid escape of fishes.
Type of Farming	Stage	Management		trological advisories
Carp culture	Nurseries/ grow- out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.	
	-	Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.	
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30 bottom feeder. Sampling of fish for growth, disease should be done regularly by netting	
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water.
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5

ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.



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31st July, 2018

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Weather forecast for next five days of Chandel (1st to 5th August, 2018)

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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to maturity		 Maintain proper drainage system to avoid water logging due to heavy rains. After rains weeding may be done to control insect pest population in the crop fields.
Soybean/ Groundnut	Flowering to fruiting		Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Blackgram/ Rice Bean	Vegetative to Flowering	Tikka disease	 Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. Hand weeding should be done after rains if the weed population is high. Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops	I	I	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Plutella Diamond black moth	 Check for infestation of Plutella Diamond black moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed. Raise main crop cauliflower nursery.
Tree bean	Grown up trees		 - Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on the main trunk up to 5 ft height from the ground. - The soil of the basin area should be earthed. Trichoderma & Pseudomonas formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be mixed in to the soil.
			- For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf blight		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @ 2gm/lit water 14 days interval at least twice.
Citrus		Greening	- Prune the disease infected twigs and burn them outside the farm area Spray Copper oxychloride @ 3ml/lit to control fungal disease. - Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation	Creening	- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one







				sucker (with broad base & narrow leaves) per pit.	
	Old Plantati	on		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants	
				per pit is required.	
				- Care must be taken to avoid wilting disease in banana grown in same pit in	
				poor drained area for more than 5-6 years.	
Turmeric	Rhizome		n ginger and	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @	
	formation	Rhizome	rot in	2g/lit water at 14 days interval.	
		turmeric			
Animal Science					
				be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/ animal	Stage	Disease Manage		Agro-meteorological advisories	
Poultry	All age groups	• Fungal Toxi		A Avoid consumption of food with funcel arough	
(Chicken/	An age groups			Avoid consumption of feed with fungal growth.	
Duck)		Deworming		• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.	
		Managemen	nt	Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.	
		Management		Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young	De-worming		Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.	
	ones	Vaccination		Vaccinate against FMD.	
		Managemen		Protect from thunder showers especially during night.	
Cattle	All age groups	Vaccination		Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.	
Cuttle	excepts the young ones	- Vaccination		 Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day. 	
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Man	nagement	Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.	
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery	•			• • •	
	l with happa net or ra	ise the pond dyke	height to avo	pid escape of fishes.	
Type of Farming	Stage	Management		trological advisories	
Carp culture	Nurseries/ grow-	Pond and water	Maintain	minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.	
	out out		Apply Lime/ Green AQ for maintaining good quality water. Make culture water free clean with high oxygen content.		
		Feed		ged 2-3 times @ 5-10% body weight per day.	
			Provide g	ood feed having 30% crude protein fortified with vitamins and mineral.	
		Fish		intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond.	
				- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting.	
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water. seed @ 3-5 % body weight per day.	
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Churachandpur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(27^{th}\ to\ 30^{th}\ July,\ 2018)$

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** °C and minimum of **21.7** to **22.7** °C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/ hr.

Weather forecast for next five days of Churachandpur (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 28-30 °C & minimum temp. 22-23 °C. Relative humidity may reach upto 100 % (max RH) & 87 % (min RH). The average wind speed may be 0-2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Kharif rice)		 Maintain water level to 5-8cm and drain out excess water if accumulated due to heavy rain. If the crop is in tillering stage, after rains weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to maturity		 Maintain proper drainage system to avoid water logging due to heavy rains. After rains weeding may be done to control insect pest population in the crop fields.
Soybean/ Groundnut	Flowering to fruiting		 - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Vegetative to Flowering		 - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray
Handingkon Comm			Malathion 1% on the walls of stores.
Horticulture Crops Name of the crop	Stage	Pest and disease	A and motocoological advisories
Cauliflower	Vegetative stage	Plutella Diamond	Agro-meteorological advisories - Check for infestation of Plutella Diamond black moth in young plants. If the
Caumiower	of early crop and nursery of main	black moth	plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on the main trunk up to 5 ft height from the ground.
			 The soil of the basin area should be earthed. Trichoderma & Pseudomonas formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be mixed in to the soil. For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf blight		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @ 2gm/lit water 14 days interval at least twice.
Citrus			 - Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
	N. Di	Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one







				sucker (with broad base & narrow leaves) per pit.
	Old Plantat	ion		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants
				per pit is required.
				- Care must be taken to avoid wilting disease in banana grown in same pit in
		2.2		poor drained area for more than 5-6 years.
Turmeric	Rhizome	Soft rot in Rhizome	ginger and	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @
	formation	turmeric	rot in	2g/lit water at 14 days interval.
Animal Science	COS	turmerie		
		rds and animals Dr	ainage may l	be constructed well around the birds or animals sheds to avoid water logging.
Name of bird/	Stage Stage	Disease		Agro-meteorological advisories
animal	Sugo	Manager		Tigito incecti diagram autisories
Poultry	All age groups	Fungal Toxii		Avoid consumption of feed with fungal growth.
(Chicken/ Duck)		Deworming		Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		Management		Do not allow to consume muddy water to protect from E.coli infection. Use
<u> </u>	All		-	water sanitizer.
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		Fascioliosis		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		 Management 		• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young	De-worming		Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
	ones	Vaccination		Vaccinate against FMD.
		Management		Protect from thunder showers especially during night.
Cattle	All age groups • Vaccina			Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
	excepts the young ones			• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Care & Management Milk fever		Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
				Give 100-150ml of mixture calcium and phosphorous daily.
Fishery				• • •
	l with happa net or re	aise the pond dyke	height to avo	pid escape of fishes.
Type of Farming	Stage	Management		trological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain	minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$.
-	out		Apply Lime/ Green AQ for maintaining good quality water. Make culture water to clean with high oxygen content.	
		Feed	Provide fe	eed 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.	
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hec	
			- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder an bottom feeder. Sampling of fish for growth, disease should be done regularly by net	
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water. eed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5
			mu/kg of I	ish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Imphal East

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (27th to 30th July, 2018)

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** °C and minimum of **21.7** to **22.7** °C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/hr.

Weather forecast for next five days of Imphal East (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 28-30 °C & minimum temp. 22-23 °C. Relative humidity may reach upto 100 % (max RH) & 74 % (min RH). The average wind speed may be 0-2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Kharif rice)		 Maintain water level to 5-8cm and drain out excess water if accumulated due to heavy rain. If the crop is in tillering stage, after rains weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to maturity		 Maintain proper drainage system to avoid water logging due to heavy rains. After rains weeding may be done to control insect pest population in the crop fields.
Soybean/ Groundnut	Flowering to fruiting		Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Vegetative to Flowering		 - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray
Hantiaultuna Cuana			Malathion 1% on the walls of stores.
Horticulture Crops Name of the crop	Store	Pest and disease	A que meteonological edizionida
Cauliflower	Stage Vegetative stage	Plutella Diamond	Agro-meteorological advisories - Check for infestation of Plutella Diamond black moth in young plants. If the
Caumower	of early crop and nursery of main	black moth	plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on the main trunk up to 5 ft height from the ground.
			 The soil of the basin area should be earthed. Trichoderma & Pseudomonas formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be mixed in to the soil. For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf blight		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @ 2gm/lit water 14 days interval at least twice.
Citrus			- Prune the disease infected twigs and burn them outside the farm area Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one







	1				
				sucker (with broad base & narrow leaves) per pit.	
	Old Plantati	Old Plantation		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants	
				per pit is required.	
				- Care must be taken to avoid wilting disease in banana grown in same pit in	
				poor drained area for more than 5-6 years.	
Turmeric	Rhizome		ginger and	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @	
	formation	Rhizome	rot in	2g/lit water at 14 days interval.	
		turmeric			
Animal Scien					
				be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/	Stage	Disease		Agro-meteorological advisories	
animal		Manage			
Poultry	All age groups	Fungal Toxi	1	Avoid consumption of feed with fungal growth.	
(Chicken/		 Deworming 		• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for	
Duck)		_		100 birds in drinking water. Again give half of the dose on second day.	
		Management	t	• Do not allow to consume muddy water to protect from E.coli infection. Use	
				water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis	1	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins	
		1 ascioliosis	,	like Livozyme @ 50ml twice daily.	
		Management	<u> </u>	Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups	De-worming		Deworming against Helminth parasites using Piperazine citrate @ 30 ml per	
1 ig	except the young	• De-worning		adult animal once.	
	ones	Vaccination		Vaccinate against FMD.	
		Management	i .	Protect from thunder showers especially during night.	
Cattle	All age groups	Vaccination		Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.	
	excepts the young			Protect animals from PICA (depraved appetite) by providing essential body	
	ones			salts (mineral forte powder) 25g/day.	
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-	
				30ml for 100 kg body weight.	
		• Care & Management		Mixture of mineral/ salts should be added in the feed/water to avoid loss of	
				essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick	
				control measures.	
		 Milk fever 		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery					
	d with happa net or ra	ise the pond dyke	height to avo	pid escape of fishes.	
Type of	Stage	Management		trological advisories	
Farming	6				
Carp culture	Nurseries/ grow-	Pond and water	Maintain	Maintain minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$.	
•	out			Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and	
			clean with high oxygen content.		
		Feed		eed 2-3 times @ 5-10% body weight per day.	
			Provide good feed having 30% crude protein fortified with vitamins and		
		Fish For semi-i - Stocking		intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond.	
				g ratio may be maintained at 40% of surface feeder, 30% column feeder and 30%	
				eder. Sampling of fish for growth, disease should be done regularly by netting.	
	Brooder	Pond water and		minimum depth of 2.0-2.2 m. Maintain good quality water.	
		feed		good quanty water. eed @ 3-5 % body weight per day.	
	Breeding	Hormone		nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5	
	Diccumg	TOTHOR		Tish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.	
	1	l	mung of f	ion for cara, fond and mingar, 0.3-0.7 mil/kg for grass carp/ figakra.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

<u>Senapati</u>

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (27^{th} to 30^{th} July, 2018)

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** $^{\circ}$ C and minimum of **21.7** to **22.7** $^{\circ}$ C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/hr.

Weather forecast for next five days of Senapati (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 25-26 °C & minimum temp. 19-20 °C. Relative humidity may reach upto 100 % (max RH) & 80 % (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering	1 est and disease	- Maintain water level to 5-8cm and drain out excess water if accumulated due to
Rice	(Kharif rice)		heavy rain.
	(Kilatii Tice)		- If the crop is in tillering stage, after rains weeding may be done manually or by
			using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf	- Spray Lambdacyhothrin @ 15 ml/ pump.
		folder	- Spray Lambuacynoumin @ 13 m/ pump.
Kharif Maize	cob formation to		- Maintain proper drainage system to avoid water logging due to heavy rains.
	maturity		- After rains weeding may be done to control insect pest population in the crop
			fields.
Soybean/	Flowering to		- Hand weeding should be done after rains to avoid hairy caterpillar. Also,
Groundnut	fruiting		earthing-up and thinning may be done after rains. Avoid earthing up after 40
OI Oulland			days of sowing in groundnut.
			- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or
			spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice	Vegetative to		- Hand weeding should be done after rains if the weed population is high.
Bean	Flowering		- Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage			For seed purpose store the seeds in RC-Seed Bin after proper drying and
becus storage	Post-harvest		cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for
	management		moisture content or weight of charcoal and dry if required.
	management		For grains, store grains in well ventilated godowns after drying properly. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage	Plutella Diamond	- Check for infestation of Plutella Diamond black moth in young plants. If the
	of early crop and	black moth	plant is young then hand picking is advised otherwise neem based pesticides may
	nursery of main		be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on
	•		the main trunk up to 5 ft height from the ground.
			- The soil of the basin area should be earthed. Trichoderma & Pseudomonas
			formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be
			mixed in to the soil.
			- For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g
			SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @
	blight		2gm/lit water 14 days interval at least twice.
Citrus	<u> </u>		- Prune the disease infected twigs and burn them outside the farm area.
			- Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a
			spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for
			dwarf varieties.
			Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one







				sucker (with broad base & narrow leaves) per pit.	
Old Plantatio		ion		 Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years. 	
Turmeric Rhizome formation		Soft rot in Rhizome turmeric	n ginger and rot in	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.	
Animal Scien					
				be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/ animal	Stage	Disease Manage		Agro-meteorological advisories	
Poultry	All age groups	Fungal Toxii		Avoid consumption of feed with fungal growth.	
(Chicken/ Duck)	age georp	Deworming	•	Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.	
		Management	t	Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.	
		Management		• Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young	De-worming		• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.	
	ones	Vaccination		Vaccinate against FMD.	
		Management		Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	Vaccination		 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day. 	
		Deworming Care & Management		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
				Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.	
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery					
	d with happa net or re				
Type of Farming	Stage	Management	Agro-met	trological advisories	
Carp culture	Nurseries/ grow- out	Pond and water		minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. ne/ Green AQ for maintaining good quality water. Make culture water fresh and	
		Feed	Provide fe	clean with high oxygen content. Provide feed 2-3 times @ 5-10% body weight per day.	
		P' 1	Provide good feed having 30% crude protein fortified with vitamins and mineral.		
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare p - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder an bottom feeder. Sampling of fish for growth, disease should be done regularly by net		
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water. eed @ 3-5 % body weight per day.	
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.	



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

Tamenglong

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (27th to 30th July, 2018)

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** °C and minimum of **21.7** to **22.7** °C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/ hr.

Weather forecast for next five days of Tamenglong $(1^{st}$ to 5^{th} August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 26-27 °C & minimum temp. 20-21 °C. Relative humidity may reach upto 100 % (max RH) & 87 % (min RH). The average wind speed may be 2 km/hr.

Field Crops	G.		1
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering		- Maintain water level to 5-8cm and drain out excess water if accumulated due to
	(Kharif rice)		heavy rain.
			- If the crop is in tillering stage, after rains weeding may be done manually or by
			using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to		- Maintain proper drainage system to avoid water logging due to heavy rains.
	maturity		- After rains weeding may be done to control insect pest population in the crop
			fields.
Soybean/	Flowering to		- Hand weeding should be done after rains to avoid hairy caterpillar. Also,
Groundnut	fruiting		earthing-up and thinning may be done after rains. Avoid earthing up after 40
			days of sowing in groundnut.
			- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or
			spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice	Vegetative to		- Hand weeding should be done after rains if the weed population is high.
Bean	Flowering		- Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage			For seed purpose store the seeds in RC-Seed Bin after proper drying and
	Post-harvest		cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for
	management		moisture content or weight of charcoal and dry if required.
			For grains, store grains in well ventilated godowns after drying properly. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage	Plutella Diamond	- Check for infestation of Plutella Diamond black moth in young plants. If the
	of early crop and	black moth	plant is young then hand picking is advised otherwise neem based pesticides may
	nursery of main		be sprayed.
	crop		- Raise main crop cauliflower nursery.
Tree bean	Grown up trees		- Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on
			the main trunk up to 5 ft height from the ground.
			- The soil of the basin area should be earthed. Trichoderma & Pseudomonas
			formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be
			mixed in to the soil.
			- For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g
			SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @
	blight		2gm/lit water 14 days interval at least twice.
Citrus			- Prune the disease infected twigs and burn them outside the farm area.
			- Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a
			spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for
			dwarf varieties.
	1	1	Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one



Manipur Centre, Lamphelpat, Imphal - 795 004





				sucker (with broad base & narrow leaves) per pit.	
	Old Plantation	on		 Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5.6 years. 	
Turmeric Rhizome formation		Soft rot in ginger and Rhizome rot in turmeric		poor drained area for more than 5-6 years. - Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.	
Animal Science					
				be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/ animal	Stage	Disease Manager	ment	Agro-meteorological advisories	
Poultry	All age groups	Fungal Toxir	1	Avoid consumption of feed with fungal growth.	
(Chicken/ Duck)		Deworming		• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.	
		Management		• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis Management		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.	
				• Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young	• De-worming		• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.	
	ones	Vaccination		Vaccinate against FMD.	
		Management		Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	Vaccination		 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day. 	
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Mana	agement	Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.	
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery				r	
	l with happa net or ra	ise the pond dyke l	height to avo	pid escape of fishes.	
Type of Farming	Stage	Management		trological advisories	
Carp culture	Nurseries/ grow- out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh an clean with high oxygen content.		
		Feed	Provide fe	eed 2-3 times @ 5-10% body weight per day. ood feed having 30% crude protein fortified with vitamins and mineral.	
		Fish	For semi-	intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. g ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% eder. Sampling of fish for growth, disease should be done regularly by netting.	
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water. eed @ 3-5 % body weight per day.	
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5	

ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

31st July, 2018

<u>Thoubal</u>

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 1st to 5th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (27th to 30th July, 2018)

Observed **44.1 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.3** to **31.7** °C and minimum of **21.7** to **22.7** °C with mean relative humidity **92.0** % max and **65.0** % min was recorded in the past four days & average wind speed was **2.9** – **4.0** km/hr.

Weather forecast for next five days of Thoubal (1st to 5th August, 2018)

Likely to have light to moderate rains upto Saturday, heavy rains on Sunday and mainly cloudy to overcast sky with maximum temp. 30-31 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 100 % (max RH) & 91 % (min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (Kharif rice)		 Maintain water level to 5-8cm and drain out excess water if accumulated due to heavy rain. If the crop is in tillering stage, after rains weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha.
		Thrips & Leaf folder	- Spray Lambdacyhothrin @ 15 ml/ pump.
Kharif Maize	cob formation to maturity		Maintain proper drainage system to avoid water logging due to heavy rains. After rains weeding may be done to control insect pest population in the crop fields.
Soybean/ Groundnut	Flowering to fruiting		 - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Vegetative to Flowering		 - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in <i>RC-Seed Bin</i> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			Maiathion 170 on the wans of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Plutella Diamond black moth	 Check for infestation of Plutella Diamond black moth in young plants. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed. Raise main crop cauliflower nursery.
Tree bean	Grown up trees		 Bordeaux paste mixed with Carbaryl (20 g/lit of water) should be applied on the main trunk up to 5 ft height from the ground. The soil of the basin area should be earthed. Trichoderma & Pseudomonas formulation @10g each/ tree mixed with 500 g FYM or vermicompost should be mixed in to the soil. For 7 yrs and above and for bearing plants apply 7 kg FYM, 120g urea, 300g SSP, 80g MOP, 1 Kg lime should be applied.
Colocassia	Leaf spot/ Leaf blight		- Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 W.P. @ 2gm/lit water 14 days interval at least twice.
Citrus		Greening	 Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease. Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Banana	New Plantation	Greening	 Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one



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"Gramin Krishi Mausam Seva"



				sucker (with broad base & narrow leaves) per pit.	
	Old Plantation	on		- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in	
Turmeric	Rhizome formation			poor drained area for more than 5-6 years. - Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.	
Animal Science					
	drinking water for bir			be constructed well around the birds or animals sheds to avoid water logging.	
Name of bird/ animal	Stage	Disease Manager	ment	Agro-meteorological advisories	
Poultry	All age groups	 Fungal Toxir 	1	Avoid consumption of feed with fungal growth.	
(Chicken/ Duck)		Deworming		• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.	
		Management		• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
Sheep/ Goat	All age groups	Vaccination		• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		Fascioliosis Management		• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.	
				• Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young	• De-worming		• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.	
	ones	 Vaccination 		Vaccinate against FMD.	
		Management		Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	Vaccination		 Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day. 	
		Deworming		• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Mana	agement	Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.	
		Milk fever		Give 100-150ml of mixture calcium and phosphorous daily.	
Fishery				r	
	d with happa net or ra	ise the pond dyke i	height to avo	pid escape of fishes.	
Type of Farming	Stage	Management		trological advisories	
Carp culture	Nurseries/ grow- out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh an clean with high oxygen content.		
		Feed	Provide fe	ood feed having 30% crude protein fortified with vitamins and mineral.	
		Fish	For semi-	intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. g ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% eder. Sampling of fish for growth, disease should be done regularly by netting.	
	Brooder	Pond water and feed	Maintain	minimum depth of 2.0-2.2 m. Maintain good quality water. eed @ 3-5 % body weight per day.	
	Breeding	Hormone	Fish horm	nones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5	

ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.