

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

15th August, 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 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th August, 2017)

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Bishnupur (16th to 20th August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 27 - 31 $^{\circ}$ C & minimum temp. 22 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 $^{\circ}$ (max RH) & 87 $^{\circ}$ (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
Rice		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	-	- Weeding may be done after rains to avoid insect pest in the crop field and also
			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		• •	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
			groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		yy	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
	management		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage			weight of charcoal and dry if required.
			- For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
			seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
O .			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
		and other leaf spot	Sixer at 15 days interval after the wet spell.
			- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)		White Shot/ White treasure) at a spacing of 45cm x 45cm.



Manipur Centre, Lamphelpat, Imphal - 795 004





King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ pla	anting		- This is the season for sowing of onion in the upland areas.
Animal Science	ices			
* Provide clean d	rinking water for			
	r leakage in sheds			
Name of bird/ animal	Stage	Dise	ase and Management	Agro-meteorological advisories
Poultry	All age groups	Dewo	orming	- 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.
(Chicken/ Turkey/ Duck)				 Bleaching powder may be spread near farm premises. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100
				ft ² area.
Sheep/ Goat	All age groups	Vacci	nation	- Sheep should be vaccinated against B.Q./ H.S.
	All age groups		orming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	except the	Vacci	nation	- Vaccinate against FMD.
8	young ones	Management		- Provide adequate amount of wholesome water (drinking) Essential body salts may be provided.
	All age groups		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the young ones	Deworming		Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
Cattle			& Flood Management	- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
E' 1		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:	1			
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out		Pond and water	Maintain minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$. Drain out excess water accumulated in fish pond due to rain.
			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.
Integrated Fish	Fish		Same as grow out fish	- Sampling of fish for growth, disease should be done regularly by netting. Same as grow out fish farming management.
Farming			management	
	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or anima folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.
Annly Agri lime	in the fish culture	e pond e	ifter the water level rea	nches normal depth after flood @ 30-35 kg /ha at 30days interval.



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MANIPUR BULLETIN

15th August, 2017

Chandel

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 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th August, 2017)

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Chandel $(16^{th}$ to 20^{th} August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 29 - 31 $^{\rm o}$ C & minimum temp. 22 - 24 $^{\rm o}$ C. Relative humidity may reach up to 99 % (max RH) & 91 % (min RH). The average wind speed may be 2-3 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
Rice		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation		- Weeding may be done after rains to avoid insect pest in the crop field and also
			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
			it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
			groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
	8	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		y	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
	management		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage			weight of charcoal and dry if required.
			- For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
			seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
O .			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
		and other leaf spot	Sixer at 15 days interval after the wet spell.
			- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)	l	White Shot/ White treasure) at a spacing of 45cm x 45cm.



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King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ pl	anting		- This is the season for sowing of onion in the upland areas.
Animal Science	es .		1	
	drinking water for er leakage in sheds			
Name of bird/ animal	Stage		ease and Management	Agro-meteorological advisories
Poultry (Chicken/	All age groups	Dew	orming	- 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.
Turkey/ Duck)				 Bleaching powder may be spread near farm premises. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age groups	Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
		De-w	vorming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Dia	All age groups except the	Vacc	ination	- Vaccinate against FMD.
Pig	young ones	Mana	agement	Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age groups excepts the young ones	B.Q. & H.S. Deworming		Vaccinate against B.Q., F.M.D. & H.S. Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
Cattle		Slush & Flood Management		- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	Nurseries/ grow	ow-out Pond and water		Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Drain out excess water accumulated in fish pond due to rain.
			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.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
r ar ming	Pig		J	About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.
		-	0	1 11 41 64 69 1 6 20 27 1 71 4 20 1 4 4 1

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.



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Churachandpur

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Weather forecast for next five days of Churachandpur $(16^{th}\ to\ 20^{th}\ August,\ 2017)$

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 28 - 32 $^{\rm o}$ C & minimum temp. 23 - 24 $^{\rm o}$ C. Relative humidity may reach up to 99 % (max RH) & 89 % (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D'		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, 1	- Weeding may be done after rains to avoid insect pest in the crop field and also
			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		yy	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tikka disease	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
Kicc bean	nowering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		nany caterpinais	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after prope
	management		drying of seeds along with charcoal at 80:20. Check for moisture content o
Seeds storage	management		weight of charcoal and dry if required.
secus storage			- For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			Matatinon 170 on the wans of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Land preparation	1 est and disease	- Land preparation for planting potato for early crop and also for production of
Potato	Land preparation		seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Cincon	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
Ginger	Kilizoille illittation	Shoot bolet/ soft for	2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Avoid water logging in the nerd Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
Turmeric	Knizome initiation		
		and other leaf spot	Sixer at 15 days interval after the wet spell.
C 110 7	Normania C 11		- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
G 116	77		the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)	l	White Shot/ White treasure) at a spacing of 45cm x 45cm.



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King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ planting			- This is the season for sowing of onion in the upland areas.
Animal Science	S			
	rinking water for			
	r leakage in sheds			
Name of bird/ animal	Stage		ease and Management	Agro-meteorological advisories
Poultry (Chicken/	All age groups	Dewo	orming	- 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.
Turkey/ Duck)				 Bleaching powder may be spread near farm premises. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100
Clara de Cara	All age groups	Vacc	ination	ft ² area. - Sheep should be vaccinated against B.Q./ H.S.
Sheep/ Goat	An age groups			-
	All age groups		orming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	except the	Vacc	ination	- Vaccinate against FMD.
	young ones	Management		Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age groups		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the young ones	Deworming		Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
Cattle		Slush	& Flood Management	- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	Nurseries/ grow	rseries/ grow-out Pond and water		Maintain minimum depth of $1.0 - 1.5$ m and pH at $7.0 - 7.5$. Drain out excess water accumulated in fish pond due to rain.
			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.
Internated Etcl	TC:-1.		C C 1	- Sampling of fish for growth, disease should be done regularly by netting.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
3	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or anima folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.
Apply Agri lime	in the fish culture	nond s	ofter the water level rea	nches normal depth after flood @ 30-35 kg /ha at 30days interval.



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15th August, 2017

Senapati

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 16th to 20th August, 2017 as below:

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Weather forecast for next five days of Senapati (16th to 20th August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 27 - 30 $^{\circ}$ C & minimum temp. 20 - 22 $^{\circ}$ C. Relative humidity may reach up to 97 % (max RH) & 83 % (min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D.		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice		_	rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, 1	- Weeding may be done after rains to avoid insect pest in the crop field and also
I I I I I I I I I I I I I I I I I I I			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
	1	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		many carespinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tikka uisease	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
Nice Deali	nowering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		nany caterpinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
	management		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of charcoal and dry if required.
Seeus storage			- For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			Manaumon 1% on the wans of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Land preparation	rest and disease	- Land preparation for planting potato for early crop and also for production of
Potato	Land preparation		seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
C'	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
Ginger	Kinzoine initiation	Shoot borer/ soft for	2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Avoid water logging in the field Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
Turmeric	Knizome initiation		
		and other leaf spot	Sixer at 15 days interval after the wet spell.
C 1101 7	Normania C 11		- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
C 140	77		the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)	l	White Shot/ White treasure) at a spacing of 45cm x 45cm.



Duck

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ pl	anting		- This is the season for sowing of onion in the upland areas.
Animal Science	es .		1	
* Provide clean of	drinking water for	birds a	nd animals.	
- Check for wate	r leakage in sheds	of bird	s and animals.	
Name of bird/ animal	Stage	Dise	ease and Management	Agro-meteorological advisories
Poultry	All age groups	Dewo	orming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day
(Chicken/				with half the dose at regular interval of 3 weeks.
Turkey/ Duck)				- Bleaching powder may be spread near farm premises Avoid fungal infested feed.
				- Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft ² area.
Sheep/ Goat	All age groups	Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
onech/ Goat	#80 8.0 mps		orming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
	All age groups			
Pig	except the		ination	- Vaccinate against FMD.
	young ones	Mana	gement	- Provide adequate amount of wholesome water (drinking).
	A 11	D.O.	0 11 0	- Essential body salts may be provided.
	All age groups excepts the young ones		& H.S. orming	Vaccinate against B.Q., F.M.D. & H.S. Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100
				kg body weight.
Cattle		Slush	& Flood Management	- Provide clean and wholesome water. Keep animals in safe place.
				Avoid grazing at the periphery of flood. Animals should be protected against
				illness caused due to damp weather. Mineral mixtures/vitamins should be fed at
		Mills	fever in Milch cow	this time. Do not allow to drink flood water. 70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:		IVIIIK	level ill willen cow	70-100mii of a mixture of Ca+ and thosphorus daily @ 5-7days.
Type of	Stogo		Managamant	Agra metrological advisories
Farming	Stage		Management	Agro-metrological 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. Drain out excess
				water accumulated in fish pond due to rain.
			Feed	Provide feed 2-3 times @ 5-10% body weight per day.
			D' 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 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.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
- ***	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one
	rig			ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is

pond.

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.

provided once a week to avoid mineral deficiency.

200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

15th August, 2017

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th August, 2017)

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Tamenglong $(16^{th}$ to 20^{th} August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 28 - 32 $^{\circ}$ C & minimum temp. 22 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 $^{\circ}$ (max RH) & 82 $^{\circ}$ (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D'		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, 1	- Weeding may be done after rains to avoid insect pest in the crop field and also
TVILLE C			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
Grounding	no wering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		nuny cuterpinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tikka disease	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Avoid harry caterphias during vegetative stage. - Construct proper drainage to avoid water logging.
Rice bean	nowering	1 ' ' '11	
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
	D (1)		it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after prope
G 1 .	management		drying of seeds along with charcoal at 80:20. Check for moisture content of
Seeds storage			weight of charcoal and dry if required.
			- For grains, store grains in well ventilated godowns after drying proper. Spra
TI (* 1) C			Malathion 1% on the walls of stores.
Horticulture Crops	G.	D (1.2)	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
			seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
		and other leaf spot	Sixer at 15 days interval after the wet spell.
			- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
Caumower	variety)	1	White Shot/ White treasure) at a spacing of 45cm x 45cm.



Manipur Centre, Lamphelpat, Imphal - 795 004





King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/	olanting		- This is the season for sowing of onion in the upland areas.
Animal Science	nal Sciences			
* Provide clean of - Check for wate				
Name of bird/ animal	Stage	Dis	ease and Management	Agro-meteorological advisories
Poultry (Chicken/	All age groups	Dew	orming	- 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.
Turkey/ Duck)				 Bleaching powder may be spread near farm premises. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age groups	Vaco	ination	- Sheep should be vaccinated against B.Q./ H.S.
	A 11	De-v	vorming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the	Vaco	ination	- Vaccinate against FMD.
116	young ones	Man	agement	- Provide adequate amount of wholesome water (drinking).- Essential body salts may be provided.
	All age groups		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the	Dew	orming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100
Cattle	young ones	Sluci	n & Flood Management	kg body weight Provide clean and wholesome water. Keep animals in safe place.
Cattle		Siusi	i & i iood Wanagement	Avoid grazing at the periphery of flood. Animals should be protected against
				illness caused due to damp weather. Mineral mixtures/vitamins should be fed at
				this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	Nurseries/ gro	series/ grow-out Pond and water		Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Drain out excess water accumulated in fish pond due to rain.
		-	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.
Integrated Fish	Fish		Same as grow out fish	Same as grow out fish farming management.
Farming			management	
	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is
	Duck			provided once a week to avoid mineral deficiency. 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

15th August, 2017

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th August, 2017)

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Thoubal (16th to 20th August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 28 - 31 $^{\rm o}$ C & minimum temp. 21 - 23 $^{\rm o}$ C. Relative humidity may reach up to 99 % (max RH) & 92 % (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
Rice	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, <u>*</u>	- Weeding may be done after rains to avoid insect pest in the crop field and also
			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		many carespinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tikka discase	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
Rice beam	nowering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		nairy caterpiliars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	D (1)		
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
C 1	management		drying of seeds along with charcoal at 80:20. Check for moisture content of
Seeds storage			weight of charcoal and dry if required.
			- For grains, store grains in well ventilated godowns after drying proper. Spray
TT			Malathion 1% on the walls of stores.
Horticulture Crops	T	T	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
			seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
		and other leaf spot	Sixer at 15 days interval after the wet spell.
			- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)		White Shot/ White treasure) at a spacing of 45cm x 45cm.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ pl	anting		- This is the season for sowing of onion in the upland areas.
Animal Science	al Sciences			
	drinking water for	birds a	ind animals.	
	r leakage in sheds			
Name of bird/ animal	Stage	Disc	ease and Management	Agro-meteorological advisories
Poultry (Chicken/	All age groups	Dew	orming	- 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.
Turkey/ Duck)				 Bleaching powder may be spread near farm premises. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age groups	Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
-		De-w	vorming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the	Vaccination		- Vaccinate against FMD.
1 Ig	young ones	Mana	agement	Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age groups	B.Q.	& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the young ones	Dewo	orming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100
~			0.77	kg body weight.
Cattle		Slush	a & Flood Management	- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against
				illness caused due to damp weather. Mineral mixtures/vitamins should be fed at
				this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:	1	ı		
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	Nurseries/ grow	rrseries/ grow-out Pond a		Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
			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.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
	Pig		-	About 30-40 two months old pigs may be kept for proper fertilization of the one
				ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal
				folder is also provided. Grass with interlocked soil in the root system (sod) is
	D 1			provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha
	1			pond.

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN

15th August, 2017

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(11^{th}\ to\ 14^{th}\ August,\ 2017)$

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Ukhrul $(16^{th}$ to 20^{th} August, 2017)

Likely to have heavy rains at isolated places from Saturday with mainly cloudy to overcast sky and maximum temp. 27 - 30 $^{\rm o}$ C & minimum temp. 20 - 21 $^{\rm o}$ C. Relative humidity may reach up to 98 % (max RH) & 87 % (min RH). The average wind speed may be 2-3 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering (kharif rice)		 After rains, drain out water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing. Ridges may be well constructed to maintain optimum water level of 5-8cm.
	(kilaili lice)	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer, leaf folder, thrips	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water (at least three pumps per sangam) after rains.
Maize	Cob formation		 Weeding may be done after rains to avoid insect pest in the crop field and also avoid water logging in the crop field. Construct proper drainage to avoid water logging.
Soybean / Groundnut	Vegetative to flowering		 Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in groundnut.
Blackgram & Rice bean	Vegetative to flowering		Avoid hairy caterpillars during vegetative stage.Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
Seeds storage	Post harvest management		 For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after prope drying of seeds along with charcoal at 80:20. Check for moisture content o weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			TAMAMINIA 170 OH WILL WILL OF BUILDING
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		 - Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. - Select the area with fertile and sandy loam soil rather than with stone and gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water as curative as well as prophylactic measure. - Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch and other leaf spot	 Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell. Avoid water logging in the field.
Cauliflower and Tomato	Nursery of mid season variety		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery. Protect nursery from damping off. Fumigate the soil with formaldehyde drench the soil with Captan 50WP.
Cauliflower	Vegetative (early variety)		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/ White Shot/ White treasure) at a spacing of 45cm x 45cm.



Manipur Centre, Lamphelpat, Imphal - 795 004





King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ planting			- This is the season for sowing of onion in the upland areas.
Animal Science	Animal Sciences			
* Provide clean of - Check for wate				
Name of bird/ animal	Stage		ease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Dew	orming	- 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. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age groups	Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
_	A 11	De-v	vorming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the	Vacc	ination	- Vaccinate against FMD.
116	young ones	Man	agement	- Provide adequate amount of wholesome water (drinking).- Essential body salts may be provided.
	All age groups		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the young ones	Dew	orming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100
Cattle		Shiel	n & Flood Management	kg body weight Provide clean and wholesome water. Keep animals in safe place.
Cattle		Siusi	i & 14000 Management	Avoid grazing at the periphery of flood. Animals should be protected against
				illness caused due to damp weather. Mineral mixtures/vitamins should be fed at
				this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture	8		Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Drain out excess water accumulated in fish pond due to rain.
		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.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
J	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

15th August, 2017

Imphal East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 16th to 20th August, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (11th to 14th August, 2017)

Observed to partly cloudy to overcast sky and **26.1 mm** rainfall was recorded during past four days. Maximum temperature range of 25.2 to 30.5 $^{\circ}$ C and minimum temperature range of 21.7 to 22.5 $^{\circ}$ C with mean relative humidity 96.75 % max and 77.25 % min was recorded in the past four days.

Weather forecast for next five days of Imphal East $(16^{th} \text{ to } 20^{th} \text{ August}, 2017)$

Likely to have heavy rains at isolated places from Saturday with partly cloudy to overcast sky and maximum temp. 28 - 31 $^{\circ}$ C & minimum temp. 22 - 24 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 88 % (min RH). The average wind speed may be 2-3 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D!		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice			rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, <u>*</u>	- Weeding may be done after rains to avoid insect pest in the crop field and also
			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		J 1	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tillia discuso	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		many earerpmans	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
	management		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage			weight of charcoal and dry if required.
50000 500100			- 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
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
2 00000	1 1		seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
5 9			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
- W		and other leaf spot	Sixer at 15 days interval after the wet spell.
		•	- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
- Ollietto			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
CHMILLO II CI	variety)		White Shot/ White treasure) at a spacing of 45cm x 45cm.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





"Gramin Krishi Mausam Seva"

King Chilli	Fruiting		Fruit rot and aphid	- Spray Redomil Gold @ 2g/lit water + Imidacloprid @ 3ml/10lit of water after rains.
Onion	Sowing/ pla	anting		- This is the season for sowing of onion in the upland areas.
Animal Science	nal Sciences			
	drinking water for	birds a	nd animals.	
	r leakage in sheds	of bird	s and animals.	
Name of bird/ animal	Stage	Dise	ease and Management	Agro-meteorological advisories
	All age groups	Dewo	orming	- 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. Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age groups	Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
		De-worming		- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the	Vaccination		- Vaccinate against FMD.
1.6	young ones	Management		- Provide adequate amount of wholesome water (drinking).- Essential body salts may be provided.
All age groups excepts the young ones		B.Q. & H.S. Deworming		Vaccinate against B.Q., F.M.D. & H.S. Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
Cattle		Slush & Flood Management		- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow		70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture			Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 - 7.5. Drain out excess water accumulated in fish pond due to rain.
		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.
Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
S	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

15th August, 2017

Imphal West

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Weather forecast for next five days of Imphal West $(16^{th} \text{ to } 20^{th} \text{ August, } 2017)$

Likely to have heavy rains at isolated places from Saturday with partly cloudy to overcast sky and maximum temp. 27 - 31 $^{\rm o}$ C & minimum temp. 21 - 23 $^{\rm o}$ C. Relative humidity may reach up to 98 % (max RH) & 82 % (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- After rains, drain out water and apply 33kg of urea as top dress after 30days of
	Tillering		transplanting. Drain in water after 48hrs of top-dressing.
	(kharif rice)		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D'		Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice		_	rains.
		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
		Case worm, borer,	- Coragen @3ml/15 lit of water or Lambdacyhothrin @ 15ml/ 15 litre of water
		leaf folder, thrips	(at least three pumps per sangam) after rains.
Maize	Cob formation	, 1	- Weeding may be done after rains to avoid insect pest in the crop field and also
TVILLE C			avoid water logging in the crop field.
			- Construct proper drainage to avoid water logging.
Soybean /	Vegetative to		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Groundnut	flowering		- Construct proper drainage to avoid water logging.
Grounding	no wering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		nuny cuterpinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water after rains to control Tikka disease in
		Tikka disease	groundnut.
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Avoid harry caterphia's during vegetative stage. - Construct proper drainage to avoid water logging.
Rice bean	nowering	1 ' ' '11	
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
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	Post harvest		- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after prope
G 1 .	management		drying of seeds along with charcoal at 80:20. Check for moisture content of
Seeds storage			weight of charcoal and dry if required.
			- For grains, store grains in well ventilated godowns after drying proper. Spra
TI (* 1) C			Malathion 1% on the walls of stores.
Horticulture Crops	- Cu	D (1.2)	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
			seed may be started after the rains in foothills and upland area.
			- Select the area with fertile and sandy loam soil rather than with stone and
			gravel.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
Turmeric	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
		and other leaf spot	Sixer at 15 days interval after the wet spell.
			- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Tomato	season variety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench
			the soil with Captan 50WP.
Cauliflower	Vegetative (early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/
	variety)		White Shot/ White treasure) at a spacing of 45cm x 45cm.



Manipur Centre, Lamphelpat, Imphal - 795 004





"Gramin Krishi Mausam Seva"

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Onion	Sowing/ planting			- This is the season for sowing of onion in the upland areas.
Animal Science	nimal Sciences			
* Provide clean of - Check for wate				
Name of bird/ animal	Stage		ease and Management	Agro-meteorological advisories
Poultry (Chicken/	All age group	s Dew	orming	 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.
Turkey/ Duck)				 Avoid fungal infested feed. Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.
Sheep/ Goat	All age group	s Vacc	ination	- Sheep should be vaccinated against B.Q./ H.S.
	A 11		vorming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age group except the	Vaco	ination	- Vaccinate against FMD.
1.6	young ones		agement	 Provide adequate amount of wholesome water (drinking). Essential body salts may be provided.
	All age group		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
Cattle	excepts the young ones		orming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slusl	n & Flood Management	- Provide clean and wholesome water. Keep animals in safe place. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk	fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Fishery:				
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture Nurseries/ grov		ow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Drain out excess water accumulated in fish pond due to rain.
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			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
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Integrated Fish Farming	Fish		Same as grow out fish management	Same as grow out fish farming management.
	Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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