

Manipur Centre, Lamphelpat, Imphal - 795 004

#### "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Bishnupur (19<sup>th</sup> to 23<sup>rd</sup> August, 2017)

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 28 - 32  $^{\circ}$  C & minimum temp. 22 - 24  $^{\circ}$  C. Relative humidity may reach up to 98 % (max RH) & 76 % (min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D.	Tillering (kharif rice)	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after rains.
Rice		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 / Groundnut	Vegetative to flowering		<ul><li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li><li>Construct proper drainage to avoid water logging.</li></ul>
		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.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
		E:11 1: :	susceptible plants.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water after rains.
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	1		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocassia	Vegetative to corm formation	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
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.



## Manipur Centre, Lamphelpat, Imphal - 795 004





Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(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 ft² area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
	All age groups except the	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig		Vaccination	- Vaccinate against FMD.
young ones	*	Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
	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.

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.
			- 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
			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	l after the water level rea	aches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

### "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Chandel (19<sup>th</sup> to 23<sup>rd</sup> August, 2017)

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 28 - 32  $^{\circ}$  C & minimum temp. 22 - 24  $^{\circ}$  C. Relative humidity may reach up to 97 % (max RH) & 72 % (min RH). The average wind speed may be 2-3 km/hr.

Stage	Pest and disease	Agro-meteorological advisories
		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
(kharif 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.
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.
		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
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.
	Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a
		thick layer of mulch or organic compost to cover the soil.
		- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
		- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
		susceptible plants.
		- Spray Carbendazim @ 0.5g / lit of water after rains.
	groundnut	
		- Avoid hairy caterpillars during vegetative stage.
flowering		- Construct proper drainage to avoid water logging.
	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.
		- 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
		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.
		Maiatinon 1% on the walls of stores.
G <sub>4</sub>	D ( 1.1'	
Vacatativa to		Agro-meteorological advisories  Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
	Lear blight	Spray Mancozed @ 2 g/iii of water at 7-10 days interval.
		- Land preparation for planting potato for early crop and also for production of
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.
Rhizome initiation	Shoot horer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
Tanzonic initiation	SHOOL DOLOL/ SOIL IOL	2g/lit water as curative as well as prophylactic measure.
		- Avoid water logging in the field.
Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
Tanzonic initiation		
	and other leaf snot	L Sixer at 15 days interval after the wet spell
	and other leaf spot	Sixer at 15 days interval after the wet spell Avoid water logging in the field.
	Tillering (kharif rice)  Cob formation  Vegetative to flowering  Vegetative to flowering  Post harvest management  Stage  Vegetative to corm formation  Land preparation  Rhizome initiation	Tillering (kharif rice)  Any sucking insect Case worm, borer, leaf folder, thrips  Cob formation  Vegetative to flowering  Tikka disease in groundnut  Vegetative to flowering  hairy caterpillars  Post harvest management  Stage  Vegetative to corm formation Land preparation  Rhizome initiation  Shoot borer/ soft rot



Manipur Centre, Lamphelpat, Imphal - 795 004





Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(Chicken/ Turkey/ Duck)			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
	All age groups except the	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig		Vaccination	- Vaccinate against FMD.
young ones	*	Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		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.

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.
			- Sampling of fish for growth, disease should be done regularly by netting.
<b>Integrated Fish</b>	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
			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	l after the water level rea	aches normal depth after flood @ 30-35 kg/ha at 30days interval.



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## "Gramin Krishi Mausam Seva"



## **MANIPUR BULLETIN**

18<sup>th</sup> August, 2017

### **Churachandpur**

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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}$ to $17^{th}$ August, 2017)

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Churachandpur $(19^{th}\ to\ 23^{rd}\ August,\ 2017)$

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 30 - 32  $^{\circ}$  C & minimum temp. 23 - 25  $^{\circ}$  C. Relative humidity may reach up to 98 % (max RH) & 79 % (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
D.	Tillering (kharif rice)	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after rains.
Rice		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		<ul> <li>Weeding may be done after rains to avoid insect pest in the crop field and also avoid water logging in the crop field.</li> <li>Construct proper drainage to avoid water logging.</li> </ul>
Soybean / Groundnut	Vegetative to flowering		<ul> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> <li>Construct proper drainage to avoid water logging.</li> </ul>
		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.
		Rust in soybean	Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil.      Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.      Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water after rains.
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		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops			,
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocassia	Vegetative to corm formation	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
Potato	Land preparation		<ul> <li>- 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.</li> <li>- Select the area with fertile and sandy loam soil rather than with stone and gravel.</li> </ul>
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	<ul> <li>Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with Sixer at 15 days interval after the wet spell.</li> <li>Avoid water logging in the field.</li> </ul>
Cauliflower and	Nursery of mid		- Use temporary rain shelter facility/ low cost polyhouse for raising nursery.



Manipur Centre, Lamphelpat, Imphal - 795 004





Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(Chicken/ Turkey/ Duck)			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
	All age groups except the	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig		Vaccination	- Vaccinate against FMD.
young ones	*	Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		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.

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.
			- 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
			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 rea	aches normal depth after flood @ 30-35 kg/ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

**18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

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## Weather forecast for next five days of Senapati (19<sup>th</sup> to 23<sup>rd</sup> August, 2017)

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 27 - 30  $^{\circ}$  C & minimum temp. 21 - 23  $^{\circ}$  C. Relative humidity may reach up to 95 % (max RH) & 80 % (min RH). The average wind speed may be 3-4 km/hr.

Field Crops	1	T	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice	(kharif 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
3.5.1	C.1.C.	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.
Carl and	M		Construct proper drainage to avoid water logging.     Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Soybean / Groundnut	Vegetative to flowering		
Groundnut	nowering	hairy caterpillars	- Construct proper drainage to avoid water logging For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		narry caterpinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		D 4 1	
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
			susceptible plants.
		Tikka disease in	- Spray Carbendazim @ 0.5g / lit of water after rains.
		groundnut	- Spray Carochdazini & 0.3g/ iit of water after fams.
Blackgram &	Vegetative to	groundiat	- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
THE SCUII	II o wering	hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		inally catespinals	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 <b>RC-seed bins</b> 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.
8			- 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
Colocassia	Vegetative to	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
	corm formation		
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.

Same as grow out fish

management



**Integrated Fish** 

**Farming** 

Fish

Pig

Duck

## ICAR Research Complex for N.E.H. Region







भाकुअनुष ICAR			"Gramin Kı	rishi Mausam Seva"
Tomato	season vari	ety		Protect nursery from damping off. Fumigate the soil with formaldehyde drench the soil with Captan 50WP.
Cauliflower	Vegetative variety)	(early		- Transplant healthy seedlings of early cauliflower (variety like Early Himlata/ White Shot/ White treasure) at a spacing of 45cm x 45cm.
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.
	es drinking water for er leakage in sheds			
Name of bird/ animal	Stage	Dise	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)				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination		- 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	Vacc	ination	- Vaccinate against FMD.
1 ig	young ones		gement	<ul><li>Provide adequate amount of wholesome water (drinking).</li><li>Essential body salts may be provided.</li></ul>
	All age groups		& H.S.	Vaccinate against B.Q., F.M.D. & H.S.
	excepts the young ones		orming	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.
		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	Carp culture Nurseries/ grow-c		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.
	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.

Same as grow out fish farming management.

provided once a week to avoid mineral deficiency.

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

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

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



Manipur Centre, Lamphelpat, Imphal - 795 004

#### "Gramin Krishi Mausam Seva"



## **MANIPUR BULLETIN**

18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Tamenglong (19<sup>th</sup> to 23<sup>rd</sup> August, 2017)

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 29 - 33  $^{\circ}$  C & minimum temp. 23 - 25  $^{\circ}$  C. Relative humidity may reach up to 98 % (max RH) & 71 % (min RH). The average wind speed may be 2 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
7.	(kharif rice)		rains.
Rice		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.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a
			thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
			susceptible plants.
		Tikka disease in	- Spray Carbendazim @ 0.5g / lit of water after rains.
		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
			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 4	management		drying of seeds along with charcoal at 80:20. Check for moisture content o
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
Colocassia	Vegetative to	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
<b>D</b> 4 4	corm formation		
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
Cinan	Rhizome initiation	Shoot borer/ soft rot	gravel Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
Ginger	Kinzome initiation	SHOOL DOTEL/ SOIL TOL	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
1 игшегіс	Kinzome initiation	and other leaf spot	Sixer at 15 days interval after the wet spell.
		and other rear spot	- Avoid water logging in the field.
Cauliflower and	Nursery of mid		- Avoid water logging in the nerd.  - Use temporary rain shelter facility/ low cost polyhouse for raising nursery.
Caumower and	Truisery of filld		- Ose temporary rain sheller facility/ low cost polyhouse for faishig hursery.



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Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken)	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(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 ft² area.
Sheep/ Goat	All age groups	Vaccination	- 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.
8	young ones	Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
	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.

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.
			- 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
			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	l after the water level rea	aches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

**18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

## Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Thoubal $(19^{th}\ to\ 23^{rd}\ August,\ 2017)$

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 29 - 32  $^{\circ}$  C & minimum temp. 23 - 25  $^{\circ}$  C. Relative humidity may reach up to 98 % (max RH) & 78 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops	1	T	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
Rice	(kharif 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
35.1	C.1.C.	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.
Carbaan /	Vegetative to		Construct proper drainage to avoid water logging.     Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Soybean / Groundnut	flowering		- Avoid leaf eating caterpliars/ insects at least upto 60 days after sowing.  - Construct proper drainage to avoid water logging.
Grounanut	nowering	hairy caterpillars	- Construct proper dramage to avoid water logging.  - For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
		narry caterpinars	it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.
		D 4 1	
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Ose a slow-release, organic fertilizer on crops and avoid excess introgen.  - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
			susceptible plants.
		Tikka disease in	- Spray Carbendazim @ 0.5g / lit of water after rains.
		groundnut	- Spray Carbendazini & 0.3g/ iit of water after fams.
Blackgram &	Vegetative to	grounding	- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering		- Construct proper drainage to avoid water logging.
Aice beam	no wering	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 <b>RC-seed bins</b> 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
Colocassia	Vegetative to	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
	corm formation		
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.



Manipur Centre, Lamphelpat, Imphal - 795 004





Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken)	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(Chicken/ Turkey/ Duck)			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
	All age groups except the	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig		Vaccination	- Vaccinate against FMD.
8	young ones	Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & 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.

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.
			- Sampling of fish for growth, disease should be done regularly by netting.
<b>Integrated Fish</b>	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
			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	l after the water level rea	aches normal depth after flood @ 30-35 kg/ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

**18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Ukhrul (19<sup>th</sup> to 23<sup>rd</sup> August, 2017)

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 27 - 30  $^{\circ}$  C & minimum temp. 21 - 23  $^{\circ}$  C. Relative humidity may reach up to 94 % (max RH) & 71 % (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
•	8		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
7.4	(kharif rice)		rains.
Rice		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.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a
			thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
			susceptible plants.
		Tikka disease in	- Spray Carbendazim @ 0.5g / lit of water after rains.
		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
	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 proper
Canda ataman	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			Maiaunon 1% on the wans of stores.
Name of the crop	Stage	Dogt and discose	Agro-meteorological advisories
Colocassia	Vegetative to	Pest and disease Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
Colocassia	corm formation	Lear oligin	Spray Mancozeo @ 2 g/iii of water at 7-10 days interval.
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of
rotato	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.
Ginger	Rhizome initiation	Shoot borer/ soft rot	- Spray Dichlorovos @ 0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @
Ginger			2g/lit water as curative as well as prophylactic measure.
			- Avoid water logging in the field.
m •	Rhizome initiation	Taphrine leaf blotch	- Spray Redomil MZ 72 WP @ 2g/lit water at least two times alternately with
Turmeric			
Turmeric		and other leaf spot	Sixer at 15 days interval after the wet spell.
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## Manipur Centre, Lamphelpat, Imphal - 795 004





## "Gramin Krishi Mausam Seva"

Tomato	season variety		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.
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 Sciences

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken)	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
(Chicken/ Turkey/ Duck)			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
<del>-</del>	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Piα		Vaccination	- Vaccinate against FMD.
Pig		Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	*	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		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.

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.
		Fish	Provide good feed having 30% crude protein fortified with vitamins and mineral.  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 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	l after the water level rea	nches normal depth after flood @ 30-35 kg /ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

#### "Gramin Krishi Mausam Seva"



## **MANIPUR BULLETIN**

18<sup>th</sup> 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 19<sup>th</sup> to 23<sup>rd</sup> August, 2017 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West $(15^{th}\ to\ 17^{th}\ August,\ 2017)$

Observed to mainly cloudy to overcast sky and **5.9 mm** rainfall was recorded during past three days. Maximum temperature range of 27.6 to 29..5  $^{\circ}$  C and minimum temperature range of 22.5 to 24.0  $^{\circ}$  C with mean relative humidity 92.67 % max and 83.33 % min was recorded in the past three days.

## Weather forecast for next five days of Imphal East $(19^{th} to 23^{rd} August, 2017)$

Likely to have heavy rains at isolated places upto Sunday with partly cloudy to overcast sky and maximum temp. 29 - 32  $^{\circ}$  C & minimum temp. 22 - 24  $^{\circ}$  C. Relative humidity may reach up to 97 % (max RH) & 82 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
•	9		- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
D!	(kharif rice)		rains.
Rice		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.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a
			thick layer of mulch or organic compost to cover the soil.
			- Use a slow-release, organic fertilizer on crops and avoid excess nitrogen.
			- Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of
			susceptible plants.
		Tikka disease in	- Spray Carbendazim @ 0.5g / lit of water after rains.
D	77	groundnut	
Blackgram &	Vegetative to		- Avoid hairy caterpillars during vegetative stage.
Rice bean	flowering	1 ' ' '11	- Construct proper drainage to avoid water logging.
		hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control
	Post harvest		it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water) after rains.  - For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
			drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of charcoal and dry if required.
Seeds storage			- For grains, store grains in well ventilated godowns after drying proper. Spray
			Malathion 1% on the walls of stores.
Horticulture Crops			Manufaction 170 on the waits of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocassia	Vegetative to	Leaf blight	Spray Mancozeb @ 2 g/lit of water at 7-10 days interval.
Colocussia	corm formation		
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) @
<u>J</u>			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.



## Manipur Centre, Lamphelpat, Imphal - 795 004





## "Gramin Krishi Mausam Seva"

Tomato	season variety		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.
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 Sciences**

- \* Provide clean drinking water for birds and animals.
- Check for water leakage in sheds of birds and animals.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> <li>Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft² area.</li> </ul>
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
<del>-</del>	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Piα		Vaccination	- Vaccinate against FMD.
Pig		Management	<ul><li>- Provide adequate amount of wholesome water (drinking).</li><li>- Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
excepts the young ones  Cattle	*	Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		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.

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.
			- 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
			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	l after the water level rea	aches normal depth after flood @ 30-35 kg/ha at 30days interval.



Manipur Centre, Lamphelpat, Imphal - 795 004

### "Gramin Krishi Mausam Seva"



## **MANIPUR BULLETIN**

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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
			- Ridges may be well constructed to maintain optimum water level of 5-8cm.
	Tillering	Bacterial leaf blight	- Streptocycline @ 2g/15 litres of water (at least three pumps per sangam) after
D.	(kharif rice)	, and the second	rains.
Rice		Any sucking insect	- Imidachloprid @ 8ml/ 15 litres of water after rains.
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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.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a
			thick layer of mulch or organic compost to cover the soil.
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	management		drying of seeds along with charcoal at 80:20. Check for moisture content o
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