

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th June, 2017)

Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Imphal East (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 30 - 33 $^{\circ}$ C & minimum temp. 21 - 22 $^{\circ}$ C. Relative humidity may reach up to 100 $^{\circ}$ 6 (min RH). The average wind speed may be 0 - 2 km/hr.

Field Crops	Q4	D (1 .1'	A construction of a first of the first of
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Rice			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of charcoal and dry if required.
<u>o</u>			- 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
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
Compea	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
onigen runneric	, ogetati i e	Zear Spot	of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ consisser	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
Chilli/ capsicum	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
	nai vesting		- Retain healthy disease free fruits for seeds.
			- Ketain healthy disease free fluits for seeds.



Hatcheries

water

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting		- These fruit plants may be planted in half moon terrace in the hills Maintain sufficient spacing for good growth. Cover crop may be grown to check soil erosion and improve soil fertility across the slope. Intercrop with green gram/ black gram in the 1 st year of newly established
			orchard. Avoid crops which get easily infected with virus (like tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize
			sweet potato) as inter crop.
Animal Science			
	rinking water for bir		· ca 1
- Apply Himax on Name of bird/ ani		Disease and	ite of fly and mosquitoes.
Name of bird/ and		Management	Agro-meteorological advisories
	All age groups		Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			 Bleaching powder may be spread near farm premises. 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	Vaccination	- Sheep should be vaccinated against B.Q.
	A11	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the you	Vaccination	- Vaccinate against FMD.
116	ones	Management	Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age groups		Vaccinate against B.Q. & H.S.
	excepts the you		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			> Protection from high temp may be ensured.
			 Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed.
Fishery:			F increase sait level in feed.
	ith happa net or raise t	he pond dyke height to a	void escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
- · · · · · · · ·	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil

– 0.3ppm and alkalinity 70-110 ppm.

should not be given for 3 days.

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

Hatching can be done in traditional hapas having outer & inner hapas or circular lhatcheries. A mild current with fine shower is needed for circular hatcheries. Feed



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 2017

Imphal West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 21st to 25th June, 2017 as below:

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Weather forecast for next five days of Imphal West (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 31 - 33 $^{\circ}$ C & minimum temp. 21 - 22 $^{\circ}$ C. Relative humidity may reach up to 99 % (max RH) & 72 % (min RH). The average wind speed may be 0 - 2 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Nice			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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	r		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
*	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



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Orange/Lime/	Planting		- These fruit plants may be planted in half moon terrace in the hills.
Lemon/Papaya/			Maintain sufficient spacing for good growth. Cover crop may be grown
Litchi/ Tree bear	ı		to check soil erosion and improve soil fertility across the slope. Inter-
			crop with green gram/ black gram in the 1st year of newly established
			orchard. Avoid crops which get easily infected with virus (like
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize/
			sweet potato) as inter crop.
Animal Science	e e		sweet potato) as fitter crop.
	s Irinking water for bird	ds and animals.	
			te of fly and mosquitoes.
Name of bird/ ani		Disease and	Agro-meteorological advisories
		Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicker	1/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
Turkey/ Duck)			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
			ft ² area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
	A 11	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the your	Vaccination	- Vaccinate against FMD.
1 ig	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the you	ng Deworming	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			➤ Increase salt level in feed.
Fishery:			
* Encircle pond w	rith happa net or raise th	ne pond dyke height to av	void escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
	C 1 1		carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil
	II		- 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular

should not be given for 3 days.

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

1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed



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MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

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Weather forecast for next five days of Bishnupur (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 31 - 32 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 100 % (max RH) & 78 % (min RH). The average wind speed may be 0 - 2 km/hr.

Field Crops	~ ·		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
	7		leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
7.7.1	77		- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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			7
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
~	77		the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
	flowering	7 00	Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
•	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



Seed production

water

Hatcheries

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting		- These fruit plants may be planted in half moon terrace in the hills. Maintain sufficient spacing for good growth. Cover crop may be grown to check soil erosion and improve soil fertility across the slope. Intercrop with green gram/ black gram in the 1 st year of newly established orchard. Avoid crops which get easily infected with virus (like tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize/sweet potato) as inter crop.
Animal Sciences	S	•	
* Provide clean d	rinking water for bi	rds and animals.	
		animal body to prevent bit	
Name of bird/ anim		Disease and Management	Agro-meteorological advisories
	All age group	s Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			 Bleaching powder may be spread near farm premises. 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 Vaccination	- Sheep should be vaccinated against B.Q.
		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age group except the you		- Vaccinate against FMD.
1 Ig	ones	Management	Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age group	s B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the yo		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
T' 1			➤ Increase salt level in feed.
Fishery:			
•	ith happa net or raise	the pond dyke height to av	roid escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
	D J	D11 C 1	Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
	Breeding	Hormone	Provide feed @ 3-5 % body weight per day. Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	Diceuing	HOHHOHE	brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.

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

Maintain good quality water having p^H 7-8, Dissolved Oxygen: 5-8ppm; CO₂: Nil

Hatching can be done in traditional hapas having outer & inner hapas or circular lhatcheries. A mild current with fine shower is needed for circular hatcheries. Feed

– 0.3ppm and alkalinity 70-110 ppm.

should not be given for 3 days.



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Weather forecast for next five days of Chandel (21st to 25th June, 2017)

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Field Crops	~:		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
	D: 1		leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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		T	7
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
¥ *** *** *	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



Manipur Centre, Lamphelpat, Imphal - 795 004





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Orange/Lime/	Planting		- These fruit plants may be planted in half moon terrace in the hills
Lemon/Papaya/			Maintain sufficient spacing for good growth. Cover crop may be grown
Litchi/ Tree bean			to check soil erosion and improve soil fertility across the slope. Inter
			crop with green gram/ black gram in the 1st year of newly established
			orchard. Avoid crops which get easily infected with virus (like
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize
			sweet potato) as inter crop.
Animal Science	5		
	rinking water for bird	ls and animals.	
- Apply Himax oii	ntment twice daily on a	nimal body to prevent bit	
Name of bird/ ani	mal Stage	Disease and	Agro-meteorological advisories
		Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken	/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
Turkey/ Duck)			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
			ft ² area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
	4.11	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the youn	Vaccination	- Vaccinate against FMD.
116	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the your	ng Deworming	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			➤ Increase salt level in feed.
Fishery:			
* Encircle pond w	ith happa net or raise th	e pond dyke height to av	roid escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
-	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Fee
	1	Ĺ	

should not be given for 3 days.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th June, 2017)

Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Churachandpur (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 31 - 32 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 100% (max RH) & 83% (min RH). The average wind speed may be 0-2 km/hr.

Field Crops Name of the crop	Ctoro	Pest and disease	A and motographedical advisories
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
	D' ' '		leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
	77		- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
# · · · · · · ·	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



Manipur Centre, Lamphelpat, Imphal - 795 004





Orange/Lime/	Planting		- These fruit plants may be planted in half moon terrace in the hills.
Lemon/Papaya/ Litchi/ Tree bean	ı		Maintain sufficient spacing for good growth. Cover crop may be grown to check soil erosion and improve soil fertility across the slope. Inter-
			crop with green gram/ black gram in the 1 st year of newly established orchard. Avoid crops which get easily infected with virus (like
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize/
			sweet potato) as inter crop.
Animal Sciences			
	rinking water for bird		
		nimal body to prevent bi	
Name of bird/ anii	mal Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises.
			- 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.
	All aga grayma	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the youn	Vaccination	- Vaccinate against FMD.
116	ones	Management	Provide adequate amount of wholesome water (drinking).Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the your	ng Deworming	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			 Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed.
Fishery:			/ Increase sait level III leed.
	ith happa net or raise th	e pond dyke height to av	void escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
Carp carraic			**************************************

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th June, 2017)

Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Senapati (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 30 - 32 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 99% (max RH) & 70% (min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Rice	(Kitarii Tice)		Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
<u>.</u>	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





O/T * /	DI d		TTI C 1, 1 , 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Orange/Lime/ Planting			- These fruit plants may be planted in half moon terrace in the hills
Lemon/Papaya/ Litchi/ Tree bean			Maintain sufficient spacing for good growth. Cover crop may be grown
Litchi/ Tree bean			to check soil erosion and improve soil fertility across the slope. Inter-
			crop with green gram/ black gram in the 1st year of newly establishe
			orchard. Avoid crops which get easily infected with virus (lik
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize
			sweet potato) as inter crop.
Animal Sciences	5		
	rinking water for bird	ds and animals.	
			te of fly and mosquitoes.
Name of bird/ anir	mal Stage	Disease and	Agro-meteorological advisories
		Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken	/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
Turkey/ Duck)			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
			ft ² area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Dia	All age groups	Vaccination	- Vaccinate against FMD.
Pig	except the youn	Management	- Provide adequate amount of wholesome water (drinking).
	ones		- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the you		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			➤ Increase salt level in feed.
Fishery:			
* Encircle pond w	ith happa net or raise th	ne pond dyke height to av	oid escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
curp curtaire	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	9		brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
	Seed production		carp. Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil
	Seed production		- 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1 hatcheries A mild current with fine shower is needed for circular hatcheries. Fee

should not be given for 3 days.

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

1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 2017

Tamengolng

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 21st to 25th June, 2017 as below:

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Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Tamenglong $(21^{st}$ to 25^{th} June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 31 - 32 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 100% (max RH) & 70% (min RH). The average wind speed may be 0-2 km/hr.

Field Crops	Q4	D 1 1	A construction that a distriction
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Rice			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of charcoal and dry if required.
<u>o</u>			- 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
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
Compea	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
Ginger/Turmeric	, ogetati i e	Zear Spot	of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ consisser	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
Chilli/ capsicum	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
	nai vesting		- Retain healthy disease free fruits for seeds.
			- Actain incatting disease free fruits for seeds.



Hatcheries

water

ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting		- These fruit plants may be planted in half moon terrace in the hills Maintain sufficient spacing for good growth. Cover crop may be grown to also be still provided and interest and inter
Litemy Tree bean			to check soil erosion and improve soil fertility across the slope. Inter crop with green gram/ black gram in the 1 st year of newly establishe
			orchard. Avoid crops which get easily infected with virus (lik
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize
			sweet potato) as inter crop.
Animal Science			
	rinking water for bi		
			bite of fly and mosquitoes.
Name of bird/ ani	8	Disease and Managemen	t
	All age groups		Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises.
			- 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	Vaccination Vaccination	- Sheep should be vaccinated against B.Q.
		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
D:a	All age groups	Vaccination	- Vaccinate against FMD.
Pig	except the you ones	Management	- Provide adequate amount of wholesome water (drinking).- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the yo	ung Deworming	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
771 7			➤ Increase salt level in feed.
Fishery:	24.1	4 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.1
Type of Farming	Stage	the pond dyke height to Management	Agro-metrological advisories
	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
Carp culture	out	i oliu aliu water	Apply Lime/ Green AQ for maintaining good quality water.
	Out	Feed	Provide 2-3 times @ 5-10% body weight per day.
		1000	Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
	Seed production		Carp. Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil

– 0.3ppm and alkalinity 70-110 ppm.

should not be given for 3 days.

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

Hatching can be done in traditional hapas having outer & inner hapas or circular lhatcheries. A mild current with fine shower is needed for circular hatcheries. Feed



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th June, 2017)

Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Thoubal (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 31 - 32 $^{\circ}$ C & minimum temp. 23 - 24 $^{\circ}$ C. Relative humidity may reach up to 100% (max RH) & 81% (min RH). The average wind speed may be 0 - 2 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Kitt			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in RC-seed bins after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		weight of 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		T	1
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
<u> </u>	37 · ·		the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
~ · · ·	flowering	T CG .	Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
-	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



Manipur Centre, Lamphelpat, Imphal - 795 004





Orange/Lime/	Planting		- These fruit plants may be planted in half moon terrace in the hills
Lemon/Papaya/			Maintain sufficient spacing for good growth. Cover crop may be grown
Litchi/ Tree bear	n		to check soil erosion and improve soil fertility across the slope. Inter
			crop with green gram/ black gram in the 1st year of newly established
			orchard. Avoid crops which get easily infected with virus (like
			tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize
			sweet potato) as inter crop.
Animal Science	20		sweet points) as inter-crop.
	drinking water for bird	s and animals.	
			te of fly and mosquitoes.
Name of bird/ ani		Disease and	Agro-meteorological advisories
		Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicker	n/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
Turkey/ Duck)			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
			ft ² area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age groups except the young	Vaccination	- Vaccinate against FMD.
1 ig	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the your	ng Deworming	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			➤ Increase salt level in feed.
Fishery:			
* Encircle pond w	vith happa net or raise the	e pond dyke height to av	void escape of fishes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
-	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil
	***		– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Fee

should not be given for 3 days.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN

23rd June, 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 21st to 25th June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 19th June, 2017)

Observed mainly cloudy to overcast sky and **9.0 mm** rainfall was recorded during past three days. Maximum temperature range of 29.0 to 29.4 $^{\circ}$ C and minimum temperature range of 21.8 to 22.9 $^{\circ}$ C with mean relative humidity 94.3 % max and 71.3 % min was recorded in the past three days.

Weather forecast for next five days of Ukhrul (21st to 25th June, 2017)

Likely to have heavy rainfall at isolated places over Manipur upto Monday with partly cloudy to overcast sky and maximum temp. 29 - 32 $^{\circ}$ C & minimum temp. 23 $^{\circ}$ C. Relative humidity may reach up to 98% (max RH) & 77% (min RH). The average wind speed may be 2-3 km/hr.

Field Crops	1	1	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Maturity (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
	Nursery to land		- Apply Carbofuran 3G @2kg/ha a week before uprooting the seedling.
	preparation for		- Maintain water level to just submerge soil surface and expose the green aerial
	transplanting		sprout after sowing.
Rice	(kharif rice)		- Land preparation of main field may be started for transplanting rice seedling.
Ricc			Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final
			leveling.
	Direct seeding		- Treat seed treatment with Humicil @ 5ml/kg seed.
	with drum seeder		- Puddle the field properly and level it.
			- Drain out water 24 hrs before sowing.
			- Use just pre-germinated seeds.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
			- At knee height stage, apply urea @ 43 kg Urea/ ha.
Soybean /	Vegetative to		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut	sowing (if not		after rain.
	done		- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
			- For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper
	Post harvest		drying of seeds along with charcoal at 80:20. Check for moisture content or
Seeds storage	management		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
Colocasia	Vegetative		- After the wet spell, earthing up may be done in 45-50 days old plants and top
			dress with 25 kg DAP/ sangam.
			- As prophylactic measure against leaf blight, spray Redomil@ 1.5g/ litre of
			water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after
			the wet spell.
Cowpea	Vegetative to pre-		Avoid water logging in and around the crop field.
	flowering		Weeding may be after rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
			of sowing or Captan @ 1.5 g/l of water after rains.
			After rains, weeding and inter-culture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP per hectare at 2-3 months after planting.
Chilli/ capsicum	Flowering and		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
*	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
			- Retain healthy disease free fruits for seeds.



Manipur Centre, Lamphelpat, Imphal - 795 004





Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting		- These fruit plants may be planted in half moon terrace in the hills. Maintain sufficient spacing for good growth. Cover crop may be grown to check soil erosion and improve soil fertility across the slope. Intercrop with green gram/ black gram in the 1 st year of newly established orchard. Avoid crops which get easily infected with virus (like tomato/chilli/okra) and heavy feeder crops (like ginger/ turmeric/maize/ sweet potato) as inter crop.
Animal Sciences	n .		sweet potato) as litter crop.
	rinking water for bire	de and animale	
		nimal body to prevent bit	e of fly and mosquitoes
Name of bird/ anim		Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			 Bleaching powder may be spread near farm premises. 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.
		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
	All age groups	Vaccination	- Vaccinate against FMD.
Pig	except the your ones	Management	 Provide adequate amount of wholesome water (drinking). Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the you		Deworm with Tolzan- F
Cattle	ones	Management	 Provide wholesome water. Protection from high temp may be ensured. Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed.
Fishery:	l		
	ith happa net or raise th	ne pond dyke height to av	oid escape of fishes.
Type of Farming	Type of Farming Stage		Agro-metrological advisories
Carp culture	Nurseries/ grow- out	Pond and water	Maintain minimum depth of 1.5 m. Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.
	Seed production		Maintain good quality water having p ^H 7-8, Dissolved Oxygen: 5-8ppm; CO ₂ : Nil – 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular lhatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.