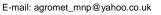


## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"





#### **MANIPUR BULLETIN**

Flowering and

fruiting to

harvesting

**Tomato/ Brinjal** 

## 16<sup>th</sup> June, 2017

## <u>Ukhrul</u>

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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Ukhrul (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and <b>48.6 mm</b> rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	
mean relative humidity 86.5 % max and 74.5 % min was recorded	RH) & 85 % (min RH). The average wind speed may be 3-4 km/hr.
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>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 leveling.</li> </ul>
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid sowing in water logged fields.</li> </ul>
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 of 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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area of in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Flowering and fruiting to harvesting		<ul> <li>Hand weeding may be done after rains.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>
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.
	T1 ' 1		

- Apply 25kg Urea after 25-30days of transplanting.



## "Gramin Krishi Mausam Seva"



Chilli/ capsicur	n Flowering and	1	- 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.
Animal Science			
	rinking water for bi		
			bite of fly and mosquitoes.
Name of bird/ ani	8	Disease and Management	
	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.
			<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 ft<sup>2</sup> area.</li> </ul>
Sheep/ Goat	All age groups	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.
D	All age group		- Vaccinate against FMD.
Pig	except the you ones	Management	<ul> <li>Provide adequate amount of wholesome water (drinking).</li> <li>Essential body salts may be provided.</li> </ul>
	All age groups	s B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the yo		Deworm with Tolzan- F
Cattle	ones	Management	<ul> <li>Provide wholesome water.</li> <li>Protection from high temp may be ensured.</li> <li>Electrolytes in the form of powder/ liquid may be given.</li> <li>Increase salt level in feed.</li> </ul>
Fishery:			
•	ith happa net or raise	the pond dyke height to	avoid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
Carp culture	out	ronu and water	Apply Lime/ Green AQ for maintaining good quality water.
	out	Feed	Provide 2-3 times @ 5-10% body weight per day.
		Tuu	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.
	Diooder	I ond water and recu	Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	Diccumg	Tiofinione	brooders @ 0.5 <i>ml/kg</i> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.
	Seed production		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Ni – 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. Fe

should not be given for 3 days.



ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN

Flowering and

fruiting to harvesting

**Tomato/ Brinjal** 

## 16<sup>th</sup> 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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Imphal East (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and <b>48.6 mm</b> rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	cloudy to overcast sky and maximum temp. 28 - 31 °C & minimum
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	temp. 21 - 22 °C. Relative humidity may reach up to 99 % (max
mean relative humidity $86.5\%$ max and $74.5\%$ min was recorded	RH) & 81 % (min RH). The average wind speed may be 2 km/hr.
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> </ul>
	(kharif rice)		Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
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 of weight of charcoal and dry if required.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Multiple 100 and 100 areas and 1</li></ul>
Horticulture Crops			Malathion 1% on the walls of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Nursery		<ul> <li>Preparation of nursery may be started for early cauliflower in the upland area of in rain protected structures if available.</li> </ul>
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Flowering and fruiting to harvesting		<ul> <li>Hand weeding may be done after rains.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>
<b>Ginger/ Turmeric</b>	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. - Apply 25kg Urea after 25-30days of transplanting.



### "Gramin Krishi Mausam Seva"



Chilli/ capsicum	n 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.
Animal Science	<b>S</b>			
* Provide clean d	rinking water for	r birds a	nd animals.	
		on anim		te of fly and mosquitoes.
Name of bird/ ani	mal Stag	<i>je</i>	Disease and	Agro-meteorological advisories
			Management	
	All age gro	oups	Fowl Pox	Vaccinate against fowl pox.
			Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken	v/		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 <sup>2</sup> area.
Sheep/ Goat	All age gro	oups	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 gro		Vaccination	- Vaccinate against FMD.
Pig	except the ones	young	Management	- Provide adequate amount of wholesome water (drinking).
	ones			- Essential body salts may be provided.
	All age gro	oups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the		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 ra	ise the p	ond dyke height to av	roid escape of fis hes.
Type of Farming	Stage	-	Ianagement	Agro-metrological advisories
	Nurseries/ grow		ond and water	Maintain minimum depth of 1.5 m.
Carp culture	out	- F	ond and water	Apply Lime/ Green AQ for maintaining good quality water.
	out	E	eed	Provide 2-3 times @ 5-10% body weight per day.
		1.	eeu	Provide 2-5 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	D	ond water and feed	Maintain minimum depth of 2.0-2.2 m.
	Dioodei	1	ond water and reed	Provide feed @ 3-5 % body weight per day.
	Breeding	н	ormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	Diccomg	11	ormone	brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
				carp.
	Seed production	n		Maintain good quality water having $p^H$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Ni
	Seea production	-		- 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	w	ater	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. Fe
				should not be since for 2 days

should not be given for 3 days.



ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN

Flowering and

fruiting to

harvesting

**Tomato/ Brinjal** 

## 16<sup>th</sup> 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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Imphal West (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during afternoon hours of $8^{th}$ June and <b>48.6 mm</b> rainfall was recorded during past four days. Maximum temperature range of 26.0 to 33.1 °C and minimum temperature range of 22.4 to 23.5 °C with mean relative humidity 86.5 % max and 74.5 % min was recorded in the past four days.	Likely to have widespread heavy rainfall over Manipur with mainly cloudy to overcast sky and maximum temp. $27 - 30$ °C & minimum temp. $20 - 22$ °C. Relative humidity may reach up to 99 % (max RH) & 85 % (min RH). The average wind speed may be 2 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land		- Maintain water level to just submerge soil surface and expose the green aerial
Kite	preparation for		sprout after sowing.
	transplanting		- Land preparation of main field may be started for transplanting rice seedling.
	(kharif rice)		Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean /	Vegetative		- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop
Groundnut			after rain.
			- 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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/	Flowering and		- Hand weeding may be done after rains.
Bhindi	fruiting to harvesting		- Retain healthy disease free fruits for seeds.
<b>Ginger/ Turmeric</b>	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 weeks
5			of sowing or Captan @ 1.5 g/l of water after rains.
	<b>F1</b> · 1		

- Apply 25kg Urea after 25-30days of transplanting.



## "Gramin Krishi Mausam Seva"



Chilli/ capsicut	m	Flowering and fruiting to harvesting		<ul> <li>In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains.</li> <li>Weeding may be done to avoid insect pest infestation after rains.</li> </ul>
Animal Science	25			
		ng water for birds	and animals	
				e of fly and mosquitoes.
- Apply Hillax of Name of bird/ and		Stage	Disease and	Agro-meteorological advisories
Ivanie of biru/ and	iiiiai	Stage	Management	Agro-meteorological advisories
		All age groups	Fowl Pox	Vaccinate against fowl pox.
		rin uge groups	Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicke	n/			
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 <sup>2</sup> 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 young	Vaccination	- Vaccinate against FMD.
IIg		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 young	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:				
-			pond dyke height to av	
Type of Farming	Sta		Management	Agro-metrological advisories
Carp culture	Nui	rseries/ 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.
	Bro	oder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
Bre				Provide feed @ 3-5 % body weight per day.
		eding	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.
	See	d production		Maintain good quality water having $p^H$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil – 0.3ppm and alkalinity 70-110 ppm.
	Hat	cheries	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.

#### SMS

Lakliba Yumjakeisa faoba nong chuba yai. Tha faraba nung hawai amadi leibak hawaida tilkha ngakthoknaba nong hangaga hectare amada 0.75 kg a.i. Simazine happiyu. Sha- shangi unsada til leitanaba Himax ointment teibiyu.

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

wq



**Tomato/ Brinjal** 

fruiting to

harvesting

Phone: 2414654, 2414260, 2414749 ; Fax : (0385) 2414654, 2414749

### E-mail: agromet\_mnp@yahoo.co.uk **ICAR Research Complex for N.E.H. Region** Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"

#### **MANIPUR BULLETIN**

## 16<sup>th</sup> 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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Bishnupur (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and <b>48.6 mm</b> rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	
mean relative humidity 86.5 % max and 74.5 % min was recorded	
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>^</b>	Grain filling		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for		- Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.
	transplanting (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 leveling.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
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			Maraunon 1% on the wans of stores.
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Nursery		<ul> <li>Preparation of nursery may be started for early cauliflower in the upland area or in rain protected structures if available.</li> </ul>
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/	Flowering and		- Hand weeding may be done after rains.
Bhindi	fruiting to harvesting		- Retain healthy disease free fruits for seeds.
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.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
	for the second	1	We dive many he down to social increating for the first of the union



#### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"



Chilli/ capsicum			- 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.
Animal Sciences			
	rinking water for bird		
		nimal body to prevent bit	
Name of bird/ anin	nal 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	<ul> <li>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.</li> </ul>
			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> </ul>
			- 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 youn	Vaccination	- Vaccinate against FMD.
IIg	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. & 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 wi	th happa net or raise th	e pond dyke height to av	oid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
- · · I	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 <sub>2</sub> : Ni – 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. Fe

should not be given for 3 days.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"





#### **MANIPUR BULLETIN**

# <u>16<sup>th</sup> June, 2017</u>

## <u>Chandel</u>

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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Chandel (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during afternoon hours of $8^{th}$ June and <b>48.6 mm</b> rainfall was recorded during past four days. Maximum temperature range of 26.0 to 33.1 °C and minimum temperature range of 22.4 to 23.5 °C with mean relative humidity 86.5 % max and 74.5 % min was recorded in the past four days.	Likely to have widespread heavy rainfall over Manipur with mainly cloudy to overcast sky and maximum temp. 28 - 31 °C & minimum

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>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 leveling.</li> </ul>
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
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 o
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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area of in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3 G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/	Flowering and		- Hand weeding may be done after rains.
Bhindi	fruiting to harvesting		- Retain healthy disease free fruits for seeds.
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.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinjal	fruiting to harvesting		- Weeding may be done to avoid insect pest infestation after rains.



#### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"

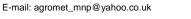


Chilli/ capsicum			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation after rains.
Animal Sciences			
	rinking water for bire		
		nimal body to prevent bit	
Name of bird/ anin	nal 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	<ul> <li>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.</li> </ul>
			<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> </ul>
			- Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> 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 your	Vaccination	- Vaccinate against FMD.
rıg	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. & 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 wi	ith happa net or raise th	ne pond dyke height to av	oid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
F	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
	Seed production		carp. Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Ni – 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. Fe

should not be given for 3 days.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

harvesting

## 16<sup>th</sup> 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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Churachandpur (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during afternoon hours of $8^{th}$ June and <b>48.6 mm</b> rainfall was recorded during past four days. Maximum temperature range of 26.0 to 33.1 °C and minimum temperature range of 22.4 to 23.5 °C with mean relative humidity 86.5 % max and 74.5 % min was recorded in the past four days.	Likely to have widespread heavy rainfall over Manipur with mainl cloudy to overcast sky and maximum temp. 27 - 30 $^{\circ}$ C & minimur temp. 21 - 23 $^{\circ}$ C. Relative humidity may reach up to 99 % (ma RH) & 83 % (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
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
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 of 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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area of in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm betweer seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3 G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Flowering and fruiting to harvesting		<ul> <li>Hand weeding may be done after rains.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>
<b>Ginger/ Turmeric</b>	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.
Tomato/ Brinjal	Flowering and fruiting to		<ul> <li>Apply 25kg Urea after 25-30days of transplanting.</li> <li>Weeding may be done to avoid insect pest infestation after rains.</li> </ul>



#### ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004

## "Gramin Krishi Mausam Seva"



		owering 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.	
Animal Sciences				
* Provide clean d				
				e of fly and mosquitoes.
Name of bird/ anin		Stage	Disease and Management	Agro-meteorological advisories
		ll 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.
				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>Avoid fungal infested feed.</li> </ul>
				- Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 $ft^2$ area.
Sheep/ Goat	A	ll 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.
<b>D'</b> -		All age groups	Vaccination	- Vaccinate against FMD.
Pig		acept the young nes	Management	<ul><li>Provide adequate amount of wholesome water (drinking).</li><li>Essential body salts may be provided.</li></ul>
	A	ll age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
		excepts the young Deworming		Deworm with Tolzan- F
Cattle		nes	Management	Provide wholesome water.
			Ũ	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 the	pond dyke height to av	oid escape of fis hes.
Type of Farming	Stage		Management	Agro-metrological advisories
Carp culture			Pond and water	Maintain minimum depth of 1.5 m.
curp culture	out	ies, Brott		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.
	Broode	er	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
				Provide feed @ 3-5 % body weight per day.
	Breedi	ng	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 p	roduction		Maintain good quality water having $p^H$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : N – 0.3ppm and alkalinity 70-110 ppm.
	Hatche	pries	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. Fe

should not be given for 3 days.



## ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"





#### MANIPUR BULLETIN

harvesting

## 16<sup>th</sup> June, 2017

## <u>Senapati</u>

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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Senapati (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and 48.6 mm rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	cloudy to overcast sky and maximum temp. 26 - 29 °C & minimum
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	temp. 19 - 21 °C. Relative humidity may reach up to 98 % (max
mean relative humidity 86.5 % max and 74.5 % min was recorded	RH) & 84 % (min RH). The average wind speed may be 2 km/hr.
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>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 leveling.</li> </ul>
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid sowing in water logged fields.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>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.</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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area o in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3 G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm pe pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Flowering and fruiting to harvesting		<ul> <li>Hand weeding may be done after rains.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>
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.
Tomato/ Brinjal	Flowering and fruiting to		<ul> <li>Apply 25kg Urea after 25-30days of transplanting.</li> <li>Weeding may be done to avoid insect pest infestation after rains.</li> </ul>



## "Gramin Krishi Mausam Seva"



Chilli/ capsicun	n 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.
Animal Science			
	rinking water for bir		
		animal body to prevent bit	
Name of bird/ ani		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.
			<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 ft<sup>2</sup> area.</li> </ul>
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.
D' -	All age groups		- Vaccinate against FMD.
Pig	except the you 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. & H.S.
	excepts the you	ung Deworming	Deworm with Tolzan- F
Cattle	ones	Management	<ul> <li>Provide wholesome water.</li> <li>Protection from high temp may be ensured.</li> <li>Electrolytes in the form of powder/ liquid may be given.</li> <li>Increase salt level in feed.</li> </ul>
Fishery:			/ Increase sait level in reed.
	ith happa net or raise t	he pond dyke height to av	roid escape of fis hes
Type of Farming			
	Stage	Management	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.
	out	Feed	Provide 2-3 times @ 5-10% body weight per day.
		reeu	Provide 2-5 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.
	DIOOUEI	Foliu water allu leeu	Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	Diccullig	Hormone	brooders @ 0.5 <i>ml/kg</i> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.
	Seed production		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Ni – 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. Fe

should not be given for 3 days.



**Tomato/ Brinjal** 

fruiting to

harvesting

Phone: 2414654, 2414260, 2414749 ; Fax : (0385) 2414654, 2414749

### E-mail: agromet\_mnp@yahoo.co.uk **ICAR Research Complex for N.E.H. Region** Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"



## 16<sup>th</sup> June, 2017

### **MANIPUR BULLETIN**

## **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 17<sup>th</sup> to 21<sup>st</sup> June, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Tamenglong (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and <b>48.6 mm</b> rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	cloudy to overcast sky and maximum temp. 28 - 31 °C & minimum
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	temp. 21 - 23 °C. Relative humidity may reach up to 98 % (max
mean relative humidity $86.5\%$ max and $74.5\%$ min was recorded	RH) & 85 % (min RH). The average wind speed may be 2 km/hr.
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>^</b>	Grain filling		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the
	(Pre-kharif rice)		crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for		- Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.
	transplanting (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 leveling.
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram &	Sowing to		- Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.
Rice bean	vegetative		- Avoid sowing in water logged fields.
Ince beam	regetative		- 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 of
Seeds storage	management		weight of charcoal and dry if required.
5			- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area o in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm betweer seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3 G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/	Flowering and		- Hand weeding may be done after rains.
Bhindi	fruiting to harvesting		- Retain healthy disease free fruits for seeds.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5 week of sowing or Captan @ 1.5 g/l of water after rains.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
T ( ) D · · · I	l c ··· ·	1	



### "Gramin Krishi Mausam Seva"



Chilli/ capsicum	n 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.	
Animal Science	<b>S</b>			
* Provide clean d	rinking water fo	r birds a	nd animals.	
		on anim		te of fly and mosquitoes.
Name of bird/ ani	mal Stag	ge	Disease and	Agro-meteorological advisories
			Management	
	All age gro	oups	Fowl Pox	Vaccinate against fowl pox.
			Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken	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 <sup>2</sup> area.
Sheep/ Goat	All age gr	oups	Vaccination	- Sheep should be vaccinated against B.Q.
	. 11		De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
Pig	All age gro except the		Vaccination	- Vaccinate against FMD.
rig	ones	young	Management	- Provide adequate amount of wholesome water (drinking).
	ones			- Essential body salts may be provided.
	All age gr	oups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the	e young	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 ra	aise the p	ond dyke height to av	oid escape of fis hes.
Type of Farming	Stage	N	Ianagement	Agro-metrological advisories
Carp culture	Nurseries/ grov		ond and water	Maintain minimum depth of 1.5 m.
Carp culture	out	v- 1	ond and water	Apply Lime/ Green AQ for maintaining good quality water.
	out	E	eed	Provide 2-3 times @ 5-10% body weight per day.
		1	eeu	Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	P	ond water and feed	Maintain minimum depth of 2.0-2.2 m.
	21000001	-		Provide feed @ 3-5 % body weight per day.
	Breeding	Н	ormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
	e			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
				carp.
	Seed productio	n		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Ni
				– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	w	ater	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. Fe
				should not be given for 2 down

should not be given for 3 days.



### E-mail: agromet\_mnp@yahoo.co.uk ICAR Research Complex for N.E.H. Region Manipur Centre, Lamphelpat, Imphal - 795 004 "Gramin Krishi Mausam Seva"



#### **MANIPUR BULLETIN**

harvesting

## 16<sup>th</sup> June, 2017

## Thoubal

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Significant past weather for the preceding bi-weekly of Imphal - West (13 <sup>th</sup> to 15 <sup>th</sup> June, 2017)	Weather forecast for next five days of Thoubal (17 <sup>th</sup> to 21 <sup>st</sup> June, 2017)
Observed mainly clear to partly cloudy but mainly cloudy during	
afternoon hours of 8 <sup>th</sup> June and <b>48.6 mm</b> rainfall was recorded	Likely to have widespread heavy rainfall over Manipur with mainly
during past four days. Maximum temperature range of 26.0 to	cloudy to overcast sky and maximum temp. 27 - 30 °C & minimum
33.1 °C and minimum temperature range of 22.4 to 23.5 °C with	temp. 20 - 22 °C. Relative humidity may reach up to 99 % (max
mean relative humidity 86.5 % max and 74.5 % min was recorded	RH) & 82 % (min RH). The average wind speed may be 2-4 km/hr.
in the past four days.	

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains. Manage proper drainage system in and around the crop field.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>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 leveling.</li> </ul>
Maize	Vegetative		- After rain weeding may be done by hand or apply Simazine @ 0.75 kg a.i./ ha.
Soybean / Groundnut	Vegetative		<ul> <li>Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid sowing in water logged fields.</li> </ul>
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
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area of in rain protected structures if available.
Colocasia	Vegetative	Alternaria leaf spot	Apply foliar spray of Trichoderma @ 10gm/ litre of water at 7 days interval.
Cowpea	Sowing		Seeds may be sown after rains in prepared bed with spacing of 10-15cm betweer seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3 G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm pe pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Flowering and fruiting to harvesting		<ul> <li>Hand weeding may be done after rains.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>
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.
Tomato/ Brinjal	Flowering and fruiting to		<ul> <li>Apply 25kg Urea after 25-30days of transplanting.</li> <li>Weeding may be done to avoid insect pest infestation after rains.</li> </ul>



## "Gramin Krishi Mausam Seva"



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.
Animal Science				
		ng water for birds		
		-		te of fly and mosquitoes.
Name of bird/ ani	mal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)		All age groups	Fowl Pox	Vaccinate against fowl pox.
			Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
			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 ft<sup>2</sup> area.</li> </ul>
Sheep/ Goat		All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
Pig		4.11	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		All age groups except the young	Vaccination	- Vaccinate against FMD.
		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. & H.S.
		excepts the youn	g Deworming	Deworm with Tolzan- F
Cattle		ones	Management	Provide wholesome water.
				<ul> <li>Protection from high temp may be ensured.</li> <li>Electrolytes in the form of powder/ liquid may be given.</li> <li>Increase salt level in feed.</li> </ul>
Fishery:		L	L.	
	ith ha	ppa net or raise the	pond dyke height to av	void escape of fis hes.
Type of Farming	Sta		Management	Agro-metrological advisories
Carp culture		rseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
	out	U U	I olid alid water	Apply Lime/ Green AQ for maintaining good quality water.
	out	-	Feed	Provide 2-3 times @ 5-10% body weight per day.
			1 ccu	Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Bro	oder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
	210		I ond water and reed	Provide feed @ 3-5 % body weight per day.
	Bre	eeding	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
	See	ed production		<ul> <li>carp.</li> <li>Maintain good quality water having p<sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO<sub>2</sub>: Nil – 0.3ppm and alkalinity 70-110 ppm.</li> </ul>
	Hat	tcheries	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. Fee about not he given for 2 down

should not be given for 3 days.