

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



### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### 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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West  $(12^{th} \text{ to } 14^{th} \text{ May}, 2015)$ 

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was 28.4-30.3 °C, range of minimum temperature observed was 18.2-20.3 °C, mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was 3.1-4.1 km/hr.

Weather forecast for next five days of Bishnupur  $(16^{th} to 20^{th} May, 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 30.0  $^{\circ}$ C & minimum temp. 15.0 – 19.0  $^{\circ}$ C. Relative humidity may reach upto 96 % (max RH) & 57 % (min RH). The average wind speed may be 4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>Avoid water logging.</li> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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Turmeric		Sowing of turn	neric			<ul> <li>Planting of Turmeric may be done in upland area.</li> <li>Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.</li> </ul>	
Tree Bean	ee Bean Nursery preparation				Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Animal Scienc	ces	1				, , , , , ,	
* Wholesome/ c	lear v	vater must be pr	ovided	after adding po	tassium	permanganate/ sanitizer for drinking water.	
		given after prope	r treat				
Name of the anima		Growth stage		Disease/ infesta	ation	Agro-meteorological advisories	
Poultry (Chick Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> <li>Avoid caking of litter materials.</li> </ul>	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months age (as and whe required)		Black Quarter, Haemorhagic Septicaemia an F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.	
Pig		All age groups	All age groups			Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.  Pond water must be given after proper treatment.	
Cattle / Buffalo/ Mithun		Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval.  * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.	
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.  - Vaccinate against F.M.D.	
Fishery:		1		J			
Carp culture	bre	eeding	Pond			d breeding can be started.  ter quality in breeding pool should be clean, apply lime to maintain num p <sup>H</sup> with high dissolved oxygen for intensive induced breeding namme.	
nurseries		rseries	Pond and water		<ul> <li>Pond management should be started for stocking fish spawns. Mair water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimu</li> <li>Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg nursery pond water 15 days before spawn stocking.</li> </ul>		
			Feed		weigh	balanced feeds should be provided 2-3 times a day @ 5-10% body nt/day	
	~		Fish	1	20-30 million spawn can be stocked in 1 ha pond.		
Gı		ow -out	Pond	and water	shoul	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done.	
			Fish			-10,000 fingerlings can be stocked per ha.  oling of fish for growth, diseases (if any) should be done by regular  ag.	
			Feed		Well splits	balanced feed should be provided @ 3-5% body weight per day in 2-3.	
Paddy cum fish culture	Fie	eld			Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.		



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### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 14<sup>th</sup> May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Chandel  $(16^{th} to 20^{th} May, 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 -30.0 °C & minimum temp. 17.0 -18.0 °C. Relative humidity may reach upto 85 % (max RH) & 51 % (min RH). The average wind speed may be 4-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>Avoid water logging.</li> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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Turmeric		Sowing of turn	meric			<ul> <li>Planting of Turmeric may be done in upland area.</li> <li>Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.</li> </ul>	
Tree Bean	e Bean Nursery preparation				Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Animal Scienc	ces	1		1.		, , , , , , , , , , , , , , , , , , ,	
* Wholesome/ c	lear v	vater must be pr	ovided	after adding po	tassiun	n permanganate/ sanitizer for drinking water.	
		given after prope	er treat				
Name of the anima		Growth stage		Disease/ infesta	ation	Agro-meteorological advisories	
Poultry (Chick Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> <li>Avoid caking of litter materials.</li> </ul>	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months age (as and whe required)		Black Quarter/ Haemorhagic Septicaemia an F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.	
Pig		All age groups	All age groups			Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.  Pond water must be given after proper treatment.	
Cattle / Buffalo/ Mithun		Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval.  * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.	
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.  - Vaccinate against F.M.D.	
Fishery:		1		<u>,                                    </u>			
Carp culture	bre	eeding	Pond			nd breeding can be started.  ter quality in breeding pool should be clean, apply lime to maintain num p <sup>H</sup> with high dissolved oxygen for intensive induced breeding ramme.	
nurseries		rseries	Pond and water		- Pond management should be started for stocking fish spawns. New water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain options - Apply a mixture of raw cow dung @500 kg/ha +75 kg urea + 7 nursery pond water 15 days before spawn stocking.		
			Feed		weigl	balanced feeds should be provided 2-3 times a day @ 5-10% body ht/day	
	~		Fish			million spawn can be stocked in 1 ha pond.	
Gı		ow -out	Pond	and water	shoul	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done.	
			Fish			-10,000 fingerlings can be stocked per ha.  oling of fish for growth, diseases (if any) should be done by regular  ng.	
			Feed		Well splits	balanced feed should be provided @ 3-5% body weight per day in 2-3.	
Paddy cum fish culture	Fie	eld			Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.		



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### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### Churachandpur

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During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Churachandpur  $(16^{th}\ to\ 20^{th}\ May,\ 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 - 29.0 °C & minimum temp. 16.0 - 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 64 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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Turmeric		Sowing of turn	neric			- Planting of Turmeric may be done in upland area.	
					- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or		
						Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg	
T D		NT				seed. Maintain spacing at 25cm X 40-45cm.	
Tree Bean		Nursery prepar	ration			Collect disease free mature and good quality tree bean pods. Procure	
						items below for nursery raising:	
4 . 10 .						Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc							
					tassium	permanganate/ sanitizer for drinking water.	
Pond water mus			r treat				
Name of the animal	l	Growth stage		Disease/ infesta	ation	Agro-meteorological advisories	
Poultry (Chicke	en/	All age groups				- Bleaching powder may be spread near farm premises.	
Turkey/ Duck)						- To avoid dehydration give vit C in drinking water along with other	
						vitamins/ ORS during evening.	
						- Avoid caking of litter materials.	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months	of	Black Quarter	/		
Sheep, Sour		age (as and whe	n	Haemorhagic		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the	
		required)		Septicaemia and		diseases mentioned.	
				F.M.D.		discusses mentioned.	
Pig		All age groups		Preventive		Wholesome/ clear water must be provided after adding potassium	
116		Till age groups		measures		permanganate/ sanitizer for drinking water.	
				measures		Pond water must be given after proper treatment.	
Cattle / Buffalo	1	Above 3 months	of	Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the	
Mithun	/	age (as and when required)				solution at 15 days interval.	
Withiti						* For Mithun, give Ivermectin @ 200 mg per kg body weight at the	
						time of salt feeding.	
						Vaccinate against B.Q./ H.S. using proven vaccine of the diseases	
				Black Quarter/		mentioned.	
				Haemorhagic Septicaemia		mentioned.	
				F.M.D.		- Vaccinate against F.M.D.	
				1 .IVI.D.		- Vaccinate against 1.141.D.	
Fishery:							
Carp culture	bre	eeding	Pond	and water		d breeding can be started.	
					- Wate	er quality in breeding pool should be clean, apply lime to maintain	
					optim	optimum p <sup>H</sup> with high dissolved oxygen for intensive induced breeding programme.	
					1 0		
	nuı	rseries	Pond	and water		- Pond management should be started for stocking fish spawns. Maintain	
						depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p <sup>H</sup> .	
					- Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg \$		
					nursei	ry pond water 15 days before spawn stocking.	
			Feed		Well 1	balanced feeds should be provided 2-3 times a day @ 5-10% body	
					weigh	nt/day	
			Fish		20-30	million spawn can be stocked in 1 ha pond.	
	Gr	ow -out	Pond	and water		lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days	
						d be done.	
			Fish			10,000 fingerlings can be stocked per ha.	
						ling of fish for growth, diseases (if any) should be done by regular	
					nettin		
			Feed			balanced feed should be provided @ 3-5% body weight per day in 2-3	
					splits.		
Paddy cum	Fie	eld	<u>I</u>			hes/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture	1				30-40% of the field can be converted into trench/pond for fish culture.		



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### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### 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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

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# Weather forecast for next five days of Imphal- East $(16^{th} to 20^{th} May, 2015)$

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 27.0 – 29.0  $^{\circ}$ C & minimum temp. 16.0 – 19.0  $^{\circ}$ C. Relative humidity may reach upto 97 % (max RH) & 49 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul> <li>Drain out excess rain water if accumulated due to rain in crop field.</li> <li>Land ploughing for kharif maize may be started.</li> </ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	<u>'</u>		
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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Turmeric		Sowing of turn	neric			- Planting of Turmeric may be done in upland area.	
					- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg		
						seed. Maintain spacing at 25cm X 40-45cm.	
Tree Bean		Nursery prepar	ration			Collect disease free mature and good quality tree bean pods. Procure	
Tree Bean		Nuisery prepar	auon			items below for nursery raising:	
						Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc	200					Sand, son porybag/ pro-tray and chemicals for seed treatment.	
						/	
					tassium	permanganate/ sanitizer for drinking water.	
Name of the anima		given after prope Growth stage	r treat	Disease/ infesta	ation	Agro-meteorological advisories	
		_		Disease/ illiesu	ation		
Poultry (Chick Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> </ul>	
						- Avoid caking of litter materials.	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months		Black Quarter	/		
		age (as and whe	n	Haemorhagic		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the	
		required)		Septicaemia ar	nd	diseases mentioned.	
				F.M.D.			
Pig		All age groups		Preventive		Wholesome/ clear water must be provided after adding potassium	
				measures		permanganate/ sanitizer for drinking water.	
						Pond water must be given after proper treatment.	
Cattle / Buffalo	/	Above 3 months of age (as and when required)		Skin infections	8	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the	
Mithun				Di di G		solution at 15 days interval.	
						* For Mithun, give Ivermectin @ 200 mg per kg body weight at the	
						time of salt feeding.	
				Black Quarter	′	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases	
				Haemorhagic		mentioned.	
				Septicaemia		Vanisht and EMD	
				F.M.D.		- Vaccinate against F.M.D.	
Fishery:							
Carp culture	bre	eeding	Pond	and water		I breeding can be started.	
					- Water quality in breeding pool should be clean, apply lime to maintain		
					optimu	um p <sup>H</sup> with high dissolved oxygen for intensive induced breeding	
					1 0	programme.	
	nu	rseries	Pond	and water		- Pond management should be started for stocking fish spawns. Maintain	
					water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum processes - Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg S		
						y pond water 15 days before spawn stocking.	
			Feed			palanced feeds should be provided 2-3 times a day @ 5-10% body	
						weight/day	
	_		Fish	•		million spawn can be stocked in 1 ha pond.	
	Gr	ow -out	Pond	and water		ar manuring with a slurry of RCD @1500kg/ha at interval of 30 days	
			г			be done.	
			Fish			10,000 fingerlings can be stocked per ha.	
						ing of fish for growth, diseases (if any) should be done by regular	
			T7: - 1		netting		
			Feed			palanced feed should be provided @ 3-5% body weight per day in 2-3	
Doddy c	Fie				splits.	poolehannals in rice field with a dorth of 1.0. 1.5m should be asset	
Paddy cum	F16	eiu.				nes/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture						% of the field can be converted into trench/pond for fish culture.	



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



### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

## 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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West  $(12^{th} \text{ to } 14^{th} \text{ May}, 2015)$ 

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Imphal- West  $(16^{th}\ to\ 20^{th}\ May,\ 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 - 29.0 °C & minimum temp. 15.0 - 19.0 °C. Relative humidity may reach upto 98 % (max RH) & 51 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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



Turmeric		Sowing of turn	neric			- Planting of Turmeric may be done in upland area.	
					- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg		
						seed. Maintain spacing at 25cm X 40-45cm.	
Tree Bean		Nursery prepar	ration			Collect disease free mature and good quality tree bean pods. Procure	
Tree Bean		Nuisery prepar	auon			items below for nursery raising:	
						Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc	200					Sand, son porybag/ pro-tray and chemicals for seed treatment.	
						/	
					tassium	permanganate/ sanitizer for drinking water.	
Name of the anima		given after prope Growth stage	r treat	Disease/ infesta	ation	Agro-meteorological advisories	
		_		Disease/ illiesu	ation		
Poultry (Chick Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> </ul>	
						- Avoid caking of litter materials.	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months		Black Quarter	/		
		age (as and whe	n	Haemorhagic		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the	
		required)		Septicaemia ar	nd	diseases mentioned.	
				F.M.D.			
Pig		All age groups		Preventive		Wholesome/ clear water must be provided after adding potassium	
				measures		permanganate/ sanitizer for drinking water.	
						Pond water must be given after proper treatment.	
Cattle / Buffalo	/	Above 3 months of age (as and when required)		Skin infections	8	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the	
Mithun				Di di G		solution at 15 days interval.	
						* For Mithun, give Ivermectin @ 200 mg per kg body weight at the	
						time of salt feeding.	
				Black Quarter	′	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases	
				Haemorhagic		mentioned.	
				Septicaemia		Vanisht and EMD	
				F.M.D.		- Vaccinate against F.M.D.	
Fishery:							
Carp culture	bre	eeding	Pond	and water		I breeding can be started.	
					- Water quality in breeding pool should be clean, apply lime to maintain		
					optimu	um p <sup>H</sup> with high dissolved oxygen for intensive induced breeding	
					1 0	programme.	
	nu	rseries	Pond	and water		- Pond management should be started for stocking fish spawns. Maintain	
					water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum processes - Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg S		
						y pond water 15 days before spawn stocking.	
			Feed			palanced feeds should be provided 2-3 times a day @ 5-10% body	
						weight/day	
	_		Fish	•		million spawn can be stocked in 1 ha pond.	
	Gr	ow -out	Pond	and water		ar manuring with a slurry of RCD @1500kg/ha at interval of 30 days	
			г			be done.	
			Fish			10,000 fingerlings can be stocked per ha.	
						ing of fish for growth, diseases (if any) should be done by regular	
			T7: - 1		netting		
			Feed			palanced feed should be provided @ 3-5% body weight per day in 2-3	
Doddy c	Fie				splits.	poolehannals in rice field with a dorth of 1.0. 1.5m should be asset	
Paddy cum	F16	eiu.				nes/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture						% of the field can be converted into trench/pond for fish culture.	



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



### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### 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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West  $(12^{th} \text{ to } 14^{th} \text{ May}, 2015)$ 

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Senapati (16<sup>th</sup> to 20<sup>th</sup> May, 2015)

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 24.0 -27.0 °C & minimum temp. 13.0 -16.0 °C. Relative humidity may reach upto 94 % (max RH) & 45 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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



Turmeric		Sowing of turn	neric			<ul> <li>Planting of Turmeric may be done in upland area.</li> <li>Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.</li> </ul>	
Tree Bean	ee Bean Nursery preparation				Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Animal Scienc	ces	1				, , , , , ,	
* Wholesome/ c	lear v	vater must be pr	ovided	after adding po	tassium	permanganate/ sanitizer for drinking water.	
		given after prope	r treat				
Name of the anima		Growth stage		Disease/ infesta	ation	Agro-meteorological advisories	
Poultry (Chick Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> <li>Avoid caking of litter materials.</li> </ul>	
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months age (as and whe required)		Black Quarter, Haemorhagic Septicaemia an F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.	
Pig		All age groups	All age groups			Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.  Pond water must be given after proper treatment.	
Cattle / Buffalo/ Mithun		Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval.  * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.	
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.  - Vaccinate against F.M.D.	
Fishery:		1		J			
Carp culture	bre	eeding	Pond			d breeding can be started.  ter quality in breeding pool should be clean, apply lime to maintain num p <sup>H</sup> with high dissolved oxygen for intensive induced breeding namme.	
nurseries		rseries	Pond and water		<ul> <li>Pond management should be started for stocking fish spawns. Mair water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimu</li> <li>Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg nursery pond water 15 days before spawn stocking.</li> </ul>		
			Feed		weigh	balanced feeds should be provided 2-3 times a day @ 5-10% body nt/day	
	~		Fish	1	20-30 million spawn can be stocked in 1 ha pond.		
Gı		ow -out	Pond	and water	shoul	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done.	
			Fish			-10,000 fingerlings can be stocked per ha.  oling of fish for growth, diseases (if any) should be done by regular  ag.	
			Feed		Well splits	balanced feed should be provided @ 3-5% body weight per day in 2-3.	
Paddy cum fish culture	Fie	eld			Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.		



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



### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### **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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West  $(12^{th} \text{ to } 14^{th} \text{ May}, 2015)$ 

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Tamenglong  $(16^{th} to 20^{th} May, 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 - 31.0 °C & minimum temp. 15.0 - 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 55 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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



Turmeric		Sowing of turmeric				- Planting of Turmeric may be done in upland area.	
						- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg	
Two Doon		Nursery prepar	ration			seed. Maintain spacing at 25cm X 40-45cm.  Collect disease free mature and good quality tree bean pods. Procure	
Tree Bean		Nursery prepar	auon			items below for nursery raising:	
						Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc	es			1		band, son poryoug, pro day and elemicals for seed deathers.	
		vatar must ha nr	ovidad	after adding no	tacciun	n permanganate/ sanitizer for drinking water.	
Pond water mus					шээшн	i permanganater samuzer jor artiking water.	
Name of the anima		Growth stage Disease/ infest		ation	Agro-meteorological advisories		
Poultry (Chicke	e <b>n</b> /	All age groups				- Bleaching powder may be spread near farm premises.	
Turkey/ Duck)		18- 8 F				- To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.	
				Coccidiosis		- Avoid caking of litter materials.	
~						- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months		Black Quarter/		Wasington State Of the State of	
		age (as and when required)		Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.	
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium	
						permanganate/ sanitizer for drinking water.	
						Pond water must be given after proper treatment.	
Cattle / Buffalo	/	Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the	
Mithun						solution at 15 days interval.	
				Black Quarter/		* For Mithun, give Ivermectin @ 200 mg per kg body weight at the	
						time of salt feeding.	
						Vaccinate against B.Q./ H.S. using proven vaccine of the diseases	
				Haemorhagic		mentioned.	
				Septicaemia		- Vaccinate against F.M.D.	
				F.M.D.		- Vaccinate against F.M.D.	
Fishery:			ı		i <del>.</del>		
Carp culture	bre	eeding	Pond	and water		nd breeding can be started.	
					- Wat	ter quality in breeding pool should be clean, apply lime to maintain	
						num p <sup>H</sup> with high dissolved oxygen for intensive induced breeding	
						ramme.	
	nui	nurseries		Pond and water		- Pond management should be started for stocking fish spawns. Maintain	
					water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p <sup>H</sup> .  - Apply a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg SSP in		
					nursery pond water 15 days before spawn stocking.		
			Feed		Well balanced feeds should be provided 2-3 times a day @ 5-10% body		
				reed		1	
					weight/day 20-30 million spawn can be stocked in 1 ha pond.		
	Gr	Grow -out		Fish Pond and water		lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days	
	GI					should be done.	
				Fish		-10,000 fingerlings can be stocked per ha.	
			1 1011		Sampling of fish for growth, diseases (if any) should be done by regular		
						netting.	
		]		Feed		Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.	
Paddy cum	Fie	eld				ches/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture					0% of the field can be converted into trench/pond for fish culture.		



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



## "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### **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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 14<sup>th</sup> May, 2015)

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

Weather forecast for next five days of Thoubal  $(16^{th} to 20^{th} May, 2015)$ 

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 - 30.0 °C & minimum temp. 15.0 - 18.0 °C. Relative humidity may reach upto 95 % (max RH) & 58 % (min RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field.</li> <li>Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>- Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>- Avoid water logging.</li> <li>- Plot must be kept weed free to avoid insect/ pest.</li> <li>- Seed rate is 100 - 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>- Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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



Turmeric		Sowing of turmeric				<ul> <li>Planting of Turmeric may be done in upland area.</li> <li>Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.</li> </ul>
Tree Bean	ree Bean Nursery preparation				Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc	ces	1		1.		, , , , , , , , , , , , , , , , , , ,
* Wholesome/ c	lear v	vater must be pr	ovided	after adding po	tassiun	n permanganate/ sanitizer for drinking water.
		given after prope	er treat			
Name of the anima		Growth stage		Disease/ infestat		Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with oth vitamins/ ORS during evening.</li> <li>Avoid caking of litter materials.</li> </ul>
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat		Above 3 months of age (as and when required)		Black Quarter/ Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.  Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun		Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval.  * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.  - Vaccinate against F.M.D.
Fishery:		1		<u>,                                    </u>		
Carp culture breeding Pour nurseries Pour Fee		Pond	d and water - Powater - Apmured Wei		nd breeding can be started.  ter quality in breeding pool should be clean, apply lime to maintain num p <sup>H</sup> with high dissolved oxygen for intensive induced breeding ramme.	
		Feed			d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p <sup>H</sup> . bly a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg SSP in rry pond water 15 days before spawn stocking.	
					balanced feeds should be provided 2-3 times a day @ 5-10% body ht/day	
	~	Fish				million spawn can be stocked in 1 ha pond.
G		Grow -out Pond Fish Feed		shou sh 8000 Sam netti ed Well splits		lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done.
						-10,000 fingerlings can be stocked per ha.  oling of fish for growth, diseases (if any) should be done by regular  ng.
						balanced feed should be provided @ 3-5% body weight per day in 2-3.
Paddy cum fish culture	Fie	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.		



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



### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 15<sup>th</sup> May, 2015

#### **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 16<sup>th</sup> to 20<sup>th</sup> May, 2015 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West $(12^{th} \text{ to } 14^{th} \text{ May}, 2015)$

During last three days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last three days. Maximum temperature range observed was  $28.4-30.3\,^{\circ}\text{C}$ , range of minimum temperature observed was  $18.2-20.3\,^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 92.3 % and 52.67 % respectively. The average wind speed range was  $3.1-4.1\,\text{km/hr}$ .

# Weather forecast for next five days of Ukhrul $(16^{th} to 20^{th} May, 2015)$

There may be light to moderate rain upto Wednesday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 24.0 -27.0 °C & minimum temp. 13.0 -16.0 °C. Relative humidity may reach upto 81 % (max RH) & 43 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	-		
Pre-kharif Rice	Milky dough stage		<ul> <li>Drain out excess water, if accumulated due to rain in crop field Maintain optimum water level.</li> <li>Check for any insect-pest infestation in the crop.</li> </ul>
Kharif Rice	Nursery		<ul> <li>Soak and incubate the well filled disease free seeds before sowing.</li> <li>Treat seeds with Nativo@2g/kg seed.</li> <li>Maintain 2-3cm water level initially and drain out drain out completely before sowing. Increase water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> </ul>
Rabi Maize	Cob maturity		<ul><li>Drain out excess rain water if accumulated due to rain in crop field.</li><li>Land ploughing for kharif maize may be started.</li></ul>
Soybean	Sowing to early vegetative		<ul> <li>Avoid water logging.</li> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm.</li> <li>Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.</li> </ul>
Groundnut	Sowing to early vegetative		<ul> <li>Avoid water logging.</li> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 &amp; JL-24. Sow seeds at spacing 30cm x 15cm.</li> <li>Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.</li> </ul>
Blackgram	Sowing to early vegetative		<ul> <li>Plot must be kept weed free to avoid insect/ pest.</li> <li>Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.</li> </ul>
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			-
Lime/ Lemon	Transplanting		<ul> <li>In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.</li> <li>Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.</li> </ul>



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



Turmeric		Sowing of turn	neric			- Planting of Turmeric may be done in upland area.	
						- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or	
						Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg	
						seed. Maintain spacing at 25cm X 40-45cm.	
Tree Bean		Nursery preparation				Collect disease free mature and good quality tree bean pods. Procure	
						items below for nursery raising:	
						Sand, soil polybag/ pro-tray and chemicals for seed treatment.	
Animal Scienc	ces						
* Wholesome/ c	lear v	vater must be pr	ovided	after adding po	tassium	permanganate/ sanitizer for drinking water.	
Pond water mus	st be g	given after prope	r treat				
Name of the anima	ıl	Growth stage	Disease/ infestati		ation	Agro-meteorological advisories	
Poultry (Chicken/ Turkey/ Duck)		All age groups				<ul> <li>Bleaching powder may be spread near farm premises.</li> <li>To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.</li> </ul>	
				Coccidiosis		- Avoid caking of litter materials.	
<u> </u>		41 0 1				- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.	
Sheep/ Goat		Above 3 months age (as and when		Black Quarter/ Haemorhagic		W. C. C. D.O./H.O. LEDID.	
		required)	11			Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the	
		required)		Septicaemia and F.M.D.		diseases mentioned.	
Pig		All age groups		F.M.D. Preventive		Wholesome/ clear water must be provided after adding potassium	
1 ig		An age groups		measures		permanganate/ sanitizer for drinking water.	
						Pond water must be given after proper treatment.	
Cattle / Buffalo	<b>)</b> /	Above 3 months	of	Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using th	
Mithun	,	age (as and when required)		Black Quarter/ Haemorhagic Septicaemia F.M.D.		solution at 15 days interval.	
						* For Mithun, give Ivermectin @ 200 mg per kg body weight at the	
						time of salt feeding.	
						Vaccinate against B.Q./ H.S. using proven vaccine of the diseases	
						mentioned.	
						- Vaccinate against F.M.D.	
Fishery:					"		
Carp culture	bre	eeding	Pond	and water	- Bund	I breeding can be started.	
curp curcure		, camp	1 0110			er quality in breeding pool should be clean, apply lime to maintain	
				optin		optimum p <sup>H</sup> with high dissolved oxygen for intensive induced breeding	
						mme.	
	nu	nurseries Pond		Pond and water - I		management should be started for stocking fish spawns. Maintain	
						water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p <sup>H</sup> .	
						y a mixture of raw cow dung @ 500 kg/ha +75 kg urea + 75kg SSP ir	
						y pond water 15 days before spawn stocking.	
			Feed			palanced feeds should be provided 2-3 times a day @ 5-10% body	
		Fish			weight		
						20-30 million spawn can be stocked in 1 ha pond.	
	Gr			Fish 3		ar manuring with a slurry of RCD @1500kg/ha at interval of 30 days	
						should be done.	
						8000-10,000 fingerlings can be stocked per ha.	
						Sampling of fish for growth, diseases (if any) should be done by regular	
					netting.		
				Feed		Well balanced feed should be provided @ 3-5% body weight per day in 2-3	
D- 11	17'	.1.1			splits.	/-l	
Paddy cum	Fie	eid				nes/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture			3		30-409	% of the field can be converted into trench/pond for fish culture.	