

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



#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Imphal West $(11^{th}\ to\ 15^{th}\ May,\ 2016)$

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 21.0 to 23.0  $^{\circ}$  C. Relative humidity may reach upto 92 % (max RH) & 34 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be North east Easterly to North Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Tillering		<ul> <li>- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> <li>Drain out excess water accumulated due to rain.</li> </ul>
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops	•		
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador
melon, pumpkin,	fruiting to	mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	harvesting	Downey mildew	<ul> <li>g/ lit of water may be done twice at 10 &amp;14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.</li> <li>- Avoid water logging in the field.</li> </ul>
Tomato/ Chilli	Fruiting to harve	est	- Avoid water logging in the crop field Retain mature and healthy fruits for seeds.
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi)High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6"Coriander seed may also be sown in between the Allium Species as an intercrop.



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Fruit plants (B	anana,				-Jungle cutting and preparation of pit for planting/transplanting of these fruit		
Lime, Lemon,		plantin	g material		plants should be started. Pit preparation should be done atleast 1 month ahead of planting.		
Orange, Kiwi,	etc.)				Procure quality planting material		
Animal Science	S	l					
Name of the animal	Growtl	n stage	Disease/ infes	station	Agro-meteorological advisories		
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manag	ement	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.		
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.		
	excepts young o		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.		
	excepts the young ones		Ectoparasitism	1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
			Hog Cholera		-Vaccination against swine fever must be carried out.		
Cattle	All age excepts		B.Q./ H.S/FM	D	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.		
	young ones		Ectoparasitism	1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
			Endoparasites Fodder crops		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weigh  -Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.		
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.		
			Decrease in milk production  Controlled breeding		-The milk & urine samples must be sent for testing.		
	Breedal group	ole age			-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.		
	Milch c	ow	Mastitis		-To prevent mastitis they should be milked completely.		
Fishery:			·				
Type of Farming	Stage		Management	Agro	o-metrological advisories		
Carp culture	Fries/ fingerli		Pond and wate	-App	ntain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. ly Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly		
	brooder	S	Feed		ide feed 1-2 times @ 2 % body weight per day.		
			Fish	prog	le and female brooders should be stock in separate ponds for early breeding rams for Common Carp.		
				- Hai	vesting of fish may be done in area where water availability is low.		



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#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West (6 $^{th}$ to 9 $^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Senapati $(11^{th} to 15^{th} May, 2016)$

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 21.0 to 23.0  $^{\circ}$  C. Relative humidity may reach upto 89 % (max RH) & 33 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be North North-Easterly to North Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	<u> </u>		
Early kharif rice	Tillering		<ul> <li>After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> <li>Drain out excess water accumulated due to rain.</li> </ul>
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, sponge gourd, etc.)	Flowering & fruiting to harvesting	Powdery mildew or Downey mildew	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador (Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7 g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harves	t	<ul> <li>Avoid water logging in the crop field.</li> <li>Retain mature and healthy fruits for seeds.</li> </ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi)High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6"Coriander seed may also be sown in between the Allium Species as an intercrop.



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Fruit plants (B	anana,				-Jungle cutting and preparation of pit for planting/transplanting of these fruit		
Lime, Lemon,		plantin	g material		plants should be started. Pit preparation should be done atleast 1 month ahead of planting.		
Orange, Kiwi,	etc.)				Procure quality planting material		
Animal Science	S	l					
Name of the animal	Growtl	n stage	Disease/ infes	station	Agro-meteorological advisories		
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manag	ement	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.		
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.		
	excepts young o		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.		
	excepts the young ones		Ectoparasitism	1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
			Hog Cholera		-Vaccination against swine fever must be carried out.		
Cattle	All age excepts		B.Q./ H.S/FM	D	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.		
	young ones		Ectoparasitism	1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
			Endoparasites Fodder crops		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weigh  -Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.		
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.		
			Decrease in milk production  Controlled breeding		-The milk & urine samples must be sent for testing.		
	Breedal group	ole age			-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.		
	Milch c	ow	Mastitis		-To prevent mastitis they should be milked completely.		
Fishery:			·				
Type of Farming	Stage		Management	Agro	o-metrological advisories		
Carp culture	Fries/ fingerli		Pond and wate	-App	ntain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. ly Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly		
	brooder	S	Feed		ide feed 1-2 times @ 2 % body weight per day.		
			Fish	prog	le and female brooders should be stock in separate ponds for early breeding rams for Common Carp.		
				- Hai	vesting of fish may be done in area where water availability is low.		



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#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### **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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Tamenglong $(11^{th}\ to\ 15^{th}\ May,\ 2016)$

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 20.0 to 22.0  $^{\circ}$  C. Relative humidity may reach upto 93 % (max RH) & 36 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South-east Easterly to Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	l l		
Early kharif rice	Tillering		<ul> <li>- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> <li>Drain out excess water accumulated due to rain.</li> </ul>
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, sponge gourd, etc.)	Flowering & fruiting to harvesting	Powdery mildew or Downey mildew	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador (Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7 g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harves	t	<ul> <li>Avoid water logging in the crop field.</li> <li>Retain mature and healthy fruits for seeds.</li> </ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi).  -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6".  -Coriander seed may also be sown in between the Allium Species as an intercrop



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Fruit plants (B	anana,		ement of		-Jungle cutting and preparation of pit for planting/transplanting of these fruit		
Lime, Lemon,		plantin	g material		plants should be started. Pit preparation should be done at least 1 month ahead of planting.		
Orange, Kiwi,	etc.)				Procure quality planting material		
Animal Science	?S	I			quanty pointing		
Name of the animal	Growtl	h stage	Disease/ infes	station	Agro-meteorological advisories		
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manag	gement	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.		
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.		
	excepts young o		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.		
excepts the young ones			Ectoparasitism	1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.		
			Hog Cholera		-Vaccination against swine fever must be carried out.		
Cattle	Cattle All age grou excepts the		B.Q./ H.S/FM	D	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.		
young one	g ones Ectoparasitism		1	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.			
			Endoparasites		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weigh		
			Fodder crops		-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.		
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.		
			Decrease in milk production  Controlled breeding		-The milk & urine samples must be sent for testing.		
	Breedal group	ble age			-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.		
	Milch c	cow	Mastitis		-To prevent mastitis they should be milked completely.		
Fishery:			•				
Type of Farming	Stage	_	Management	Agre	o-metrological advisories		
Carp culture	Fries/ fingerli		Pond and water	-App	intain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. by Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.		
	brooder	rs.	Feed		ide feed 1-2 times @ 2 % body weight per day.		
			Fish	prog	le and female brooders should be stock in separate ponds for early breeding rams for Common Carp.		
				- Ha	rvesting of fish may be done in area where water availability is low.		



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#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### **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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

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## Weather forecast for next five days of Thoubal $(11^{th}\ to\ 15^{th}\ May,\ 2016)$

Likely to have light rain upto Sunday. Sky will remain fair to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 19.0 to 21.0  $^{\circ}$  C. Relative humidity may reach upto 89 % (max RH) & 35 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be South Easterly to North Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	1		
Early kharif rice	Tillering		<ul> <li>After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> </ul>
			Drain out excess water accumulated due to rain.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation Stem borer		- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Miradon
melon, pumpkin,	fruiting to	mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	harvesting	Downey mildew	g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.
			- Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harve		<ul><li>Avoid water logging in the crop field.</li><li>Retain mature and healthy fruits for seeds.</li></ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days
			-Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be done.
			-Spacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm
			- Desirable weight of rhizome-15-25 gm with 2-3buds.
			-Mulching with dried twigs/paddy straw is recommended.
			-Complete sowing as early as possible preferably in the upland areas.
Dhindi/oar cc	Courina		-Trichoderma harzianum may also be used for seed treatmentProper drainage should be given to drain excess water
Bhindi/cowpea	Sowing		-Sowing should be done in permissible field condition.
Allium odorosum			-Sowing should be done in permissible field condition.  -Plantation of <i>Allium odorosum</i> (Maroi nakuppi).
Autum vavrosum			-Frankation of Adulation of Aviation (Mariot hakuppi).  -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high
			yield at a spacing of 6" X 6".
			-Coriander seed may also be sown in between the Allium Species as an intercrop.



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



Fruit plants (F	Banana,		ement of		-Jungle cutting and preparation of pit for planting/transplanting of these fruit	
Orange, Kiwi, etc.)		plan		plants should be started. Pit preparation should be done atleast 1 month ahead of plantingProcure quality planting material		
Animal Scienc	es		<u>'</u>	•	1 71 0	
Name of the animal	Growt	h stage	Disease/ infes	ation	Agro-meteorological advisories	
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manage	ment	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.	
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.	
	excepts young		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.	
	excepts young		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
			Hog Cholera		-Vaccination against swine fever must be carried out.	
Cattle	All age		B.Q./ H.S/FMI	)	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.	
	young (	ones	Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
			Endoparasites  Fodder crops  Puerperal Fever in Pregnant animals		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
					-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.	
					-50-60 gram of mineral mixture every day.	
			Decrease in mi	k production	-The milk & urine samples must be sent for testing.	
Breedable age group		ble age	Controlled bree	ding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.	
	Milch o	cow	Mastitis		-To prevent mastitis they should be milked completely.	
Fishery:						
Type of Farming	Stage		Management		-metrological advisories	
Carp culture	Fries/ fingerli		Pond and water	-Appl	tain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. y Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.	
	broode	rs	Feed		de feed 1-2 times @ 2 % body weight per day.	
			Fish	progra	e and female brooders should be stock in separate ponds for early breeding ams for Common Carp.	
				- Harv	vesting of fish may be done in area where water availability is low.	



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



#### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}\text{C}$ , range of minimum temperature observed was 20.5 to 22.0  $^{\circ}\text{C}$ , mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

# Weather forecast for next five days of Ukhrul $(11^{th}\ to\ 15^{th}\ May,2016)$

Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 32.0 to 33.0  $^{\circ}$  C & minimum temp. 19.0 to 20.0  $^{\circ}$  C. Relative humidity may reach upto 82 % (max RH) & 29 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be North-East Easterly to North Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	<b>,</b>		
Early kharif rice	Tillering		<ul> <li>- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> </ul>
Soybean	Sowing		Drain out excess water accumulated due to rain.  Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation Stem borer		- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, sponge gourd, etc.)	Flowering & fruiting to harvesting	Powdery mildew or Downey mildew	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador (Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7 g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harve	est	<ul><li>Avoid water logging in the crop field.</li><li>Retain mature and healthy fruits for seeds.</li></ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			<ul> <li>-Plantation of <i>Allium odorosum</i> (Maroi nakuppi).</li> <li>-High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6".</li> <li>-Coriander seed may also be sown in between the Allium Species as an intercrop.</li> </ul>



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Fruit plants (F	Banana,		ement of		-Jungle cutting and preparation of pit for planting/transplanting of these fruit	
Orange, Kiwi, etc.)		plan		plants should be started. Pit preparation should be done atleast 1 month ahead of plantingProcure quality planting material		
Animal Scienc	es		<u>'</u>	•	1 71 0	
Name of the animal	Growt	h stage	Disease/ infes	ation	Agro-meteorological advisories	
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manage	ment	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.	
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.	
	excepts young		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.	
	excepts young		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
			Hog Cholera		-Vaccination against swine fever must be carried out.	
Cattle	All age		B.Q./ H.S/FMI	)	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.	
	young (	ones	Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.	
			Endoparasites  Fodder crops  Puerperal Fever in Pregnant animals		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
					-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.	
					-50-60 gram of mineral mixture every day.	
			Decrease in mi	k production	-The milk & urine samples must be sent for testing.	
Breedable age group		ble age	Controlled bree	ding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.	
	Milch o	cow	Mastitis		-To prevent mastitis they should be milked completely.	
Fishery:						
Type of Farming	Stage		Management		-metrological advisories	
Carp culture	Fries/ fingerli		Pond and water	-Appl	tain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. y Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.	
	broode	rs	Feed		de feed 1-2 times @ 2 % body weight per day.	
			Fish	progra	e and female brooders should be stock in separate ponds for early breeding ams for Common Carp.	
				- Harv	vesting of fish may be done in area where water availability is low.	



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



#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### Bishnupur

IAAS, TCAR-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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Bishnupur (11 $^{th}$ to 15 $^{th}$ May, 2016)

Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 21.0 to 22.0  $^{\circ}$  C. Relative humidity may reach upto 91 % (max RH) & 37 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be South Easterly to North west Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Tillering		- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.
			- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
			Drain out excess water accumulated due to rain.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan
Horticulture Crops			3G at maize whorl.
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador
melon, pumpkin,		mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	fruiting to		g/ lit of water may be done twice at 10 &14 days intervals respectively against
sponge gourd, etc.)	harvesting	Downey mildew	Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harve	est	<ul><li>Avoid water logging in the crop field.</li><li>Retain mature and healthy fruits for seeds.</li></ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases
			-Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for
			½ hour and sowing may be done.
			-Spacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm
			- Desirable weight of rhizome-15-25 gm with 2-3buds.
			-Mulching with dried twigs/paddy straw is recommended.
			-Complete sowing as early as possible preferably in the upland areas.
			-Trichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water
			-Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi).
			-High density planting (1-0-12 nos. of rhizome) per hill is recommended for high
			yield at a spacing of 6" X 6".  -Coriander seed may also be sown in between the Allium Species as an intercrop.
			-Contained seed may also be sown in between the Amuni species as an intercrop.



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Fruit plants (B Lime, Lemon,	* * * * * * * * * * * * * * * * * * * *				-Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done at least 1 month ahead of
Orange, Kiwi,	etc.)	prantin	g material		planting.
					-Procure quality planting material
Animal Science			I 54 / 4 6		
Name of the animal	Growtl	n stage	Disease/ infe	station	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & manag	gement	- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.
Sheep/ Goat	All age				- Pepirazine compound- 100mg/kg orally for 3 days.
	excepts young o		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age excepts		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.
	young o		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Hog Cholera		-Vaccination against swine fever must be carried out.
Cattle	All age excepts		B.Q./ H.S/FM	D	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
	young ones		Ectoparasitism	n	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Endoparasites		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
			Fodder crops		-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.
				nilk production	-The milk & urine samples must be sent for testing.
Breedable age group		ble age	Controlled bre	eeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch c	cow	Mastitis		-To prevent mastitis they should be milked completely.
Fishery:			_		
Type of Farming	Stage		Management	J	ro-metrological advisories
Carp culture	Fries/ fingerli		Pond and water	-Ap	intain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. ply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
	brooder	'S	Feed		vide feed 1-2 times @ 2 % body weight per day.
			Fish	prog	ale and female brooders should be stock in separate ponds for early breeding grams for Common Carp.  British may be done in area where water availability is low.



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



#### "Gramin Krishi Mausam Seva"

## MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Chandel $(11^{th}\ to\ 15^{th}\ May,\ 2016)$

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 21.0 to 23.0  $^{\circ}$  C. Relative humidity may reach upto 84 % (max RH) & 31 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be South Easterly to North Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops		•	
Early kharif rice	Tillering		<ul> <li>- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> </ul>
			Drain out excess water accumulated due to rain.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation Stem borer		- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Miradon
melon, pumpkin,	fruiting to	mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	harvesting	Downey mildew	g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harve	est	<ul><li>Avoid water logging in the crop field.</li><li>Retain mature and healthy fruits for seeds.</li></ul>
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi)High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6"Coriander seed may also be sown in between the Allium Species as an intercrop.



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		ement of		-Jungle cutting and preparation of pit for planting/transplanting of these fruit	
		pla		plants should be started. Pit preparation should be done atleast 1 month ahead of planting.  Procure quality planting material	
Animal Science	es				
Name of the animal	Growt	h stage	Disease/ infestation		Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		Care & management		- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.
Sheep/ Goat					- Pepirazine compound- 100mg/kg orally for 3 days.
			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.
excepts the young ones			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Hog Cholera		-Vaccination against swine fever must be carried out.
ex	All age		B.Q./ H.S/FMD		-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
	young ones		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Endoparasites		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
			Fodder crops		-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.
			Decrease in mi	k production	-The milk & urine samples must be sent for testing.
	Breedal	ble age	Controlled breeding		-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow		Mastitis		-To prevent mastitis they should be milked completely.
Fishery:	1				
Type of Farming	Stage		Management		-metrological advisories
Carp culture	Fries/ fingerlings		Pond and water	-Appl	tain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. y Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
	broode	rs	Feed		de feed 1-2 times @ 2 % body weight per day.
			Fish	progra	e and female brooders should be stock in separate ponds for early breeding ams for Common Carp.
			- Harvest		vesting of fish may be done in area where water availability is low.



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



#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Churachandpur ( $11^{th}$ to $15^{th}$ May, 2016)

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 32.0 to 33.0  $^{\circ}$  C & minimum temp. 20.0 to 22.0  $^{\circ}$  C. Relative humidity may reach upto 93 % (max RH) & 41 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be South to South Westerly during the next five days.

N. 6.1	, a	D ( 11	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops Early kharif rice	Tillering		- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after
•			complete removal of water Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
			Drain out excess water accumulated due to rain.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation Stem borer		- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador
melon, pumpkin,	fruiting to	mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	harvesting	Downey mildew	g/ lit of water may be done twice at 10 &14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.  - Avoid water logging in the field.
Tomato/ Chilli	Fruiting to harve	st	- Avoid water logging in the crop field Retain mature and healthy fruits for seeds.
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/ lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/ lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days
			-Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be done.
			-Spacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm
			- Desirable weight of rhizome-15-25 gm with 2-3buds.
			-Mulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areas.
			-Complete sowing as early as possible preferably in the upland areas.  -Trichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water
			-Sowing should be done in permissible field condition.
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi)High density planting (1-0-12 nos. of rhizome) per hill is recommended for high
			yield at a spacing of 6" X 6".



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



* * * * * * * * * * * * * * * * * * * *				-Jungle cutting and preparation of pit for planting/transplanting of these fruit	
Lime, Lemon, planting Orange, Kiwi, etc.)		plan		lants should be started. Pit preparation should be done atleast 1 month ahead of lanting.	
				-Procure quality planting material	
Animal Science	S	l			
Name of the animal	Growtl	n stage	Disease/ infestation		Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		Care & management		- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.
Sheep/ Goat					- Pepirazine compound- 100mg/kg orally for 3 days.
			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age excepts		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.
	young o		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Hog Cholera		-Vaccination against swine fever must be carried out.
	All age groups excepts the young ones		B.Q./ H.S/FMD		-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Endoparasite	S	- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
			Fodder crops		-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.
			Puerperal Feve	er in Pregnant	-50-60 gram of mineral mixture every day.
			Decrease in mi	ilk production	-The milk & urine samples must be sent for testing.
	Breedal group	ole age	Controlled breeding		-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow Mastitis			-To prevent mastitis they should be milked completely.	
Fishery:			·		
Type of Farming	Stage		Management Agro-me		o-metrological advisories
Carp culture	Fries/ fingerlin		Pond and wate	-App	ntain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. ly Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly
	brooder	S	Feed		ide feed 1-2 times @ 2 % body weight per day.
			Fish	prog	le and female brooders should be stock in separate ponds for early breeding rams for Common Carp.
				- Hai	vesting of fish may be done in area where water availability is low.



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



#### "Gramin Krishi Mausam Seva"

#### MANIPUR BULLETIN 10<sup>th</sup> May, 2016

#### 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 11<sup>th</sup> to 15<sup>th</sup> May, 2016 as below:

# Significant past weather for the preceding bi-weekly of Imphal - West ( $6^{th}$ to $9^{th}$ May, 2016)

The sky was fair to mainly cloudy. Rainfall of 0.0 mm was recorded during past four days. Maximum temperature range observed was 28.8 to 31.3  $^{\circ}$ C, range of minimum temperature observed was 20.5 to 22.0  $^{\circ}$  C, mean relative humidity observed in morning and afternoon were 85.0 % and 61.0 % respectively. The average wind speed range was 4.5 to 6.6 km/hr.

## Weather forecast for next five days of Imphal East $(11^{th}\ to\ 15^{th}\ May,\ 2016)$

Likely to have light rain upto Sunday. Sky will remain variable to mainly cloudy, with maximum temp. 31.0 to 32.0  $^{\circ}$  C & minimum temp. 20.0 to 21.0  $^{\circ}$  C. Relative humidity may reach upto 91 % (max RH) & 34 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be North Easterly to North North-Westerly during the next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Tillering		<ul> <li>- After rains, apply 30.0 kg Urea/ha at 25 to 30 days after transplanting, after complete removal of water.</li> <li>- Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.</li> <li>Drain out excess water accumulated due to rain.</li> </ul>
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate is 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335.
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm after rains. It is recommended to apply 44 kg of urea, 375kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Blackgram	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
Rabi Maize	Cob formation	Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuradan 3G at maize whorl.
Horticulture Crops			
Cucurbits (Water-	Flowering &	Powdery	- After the wet spell, harvest mature fruits then prophylactic spray of Mirador
melon, pumpkin,	fruiting to	mildew or	(Azoxystrobin 23%) @ 1ml/ lit of water or Bayleton (Triademiton 25WP) @ 0.7
sponge gourd, etc.)	harvesting	Downey mildew	<ul> <li>g/ lit of water may be done twice at 10 &amp;14 days intervals respectively against Powdery mildew or Downey mildew specially in damped or moist area.</li> <li>- Avoid water logging in the field.</li> </ul>
Tomato/ Chilli	Fruiting to harve	est	- Avoid water logging in the crop field Retain mature and healthy fruits for seeds.
		Fruit rot	Avoid water logging and after rains spray Dithane M-45 @ 2 g/lit of water twice at 7 days interval or Mirador (Azoxystrobin 23%) @ 1ml/lit of water.
Ginger/Turmeric	Sowing		-The seed rhizome should be screened from pest and diseases -Spread in the shed for 1-2 days -Treat rhizome with Captan 50 W P or Hexaconazeb @ 3gm/kg seed & keep for ½ hour and sowing may be doneSpacing for Ginger -20cm X 30cm; turmeric- 20 cm X 45-50cm - Desirable weight of rhizome-15-25 gm with 2-3budsMulching with dried twigs/paddy straw is recommendedComplete sowing as early as possible preferably in the upland areasTrichoderma harzianum may also be used for seed treatment.
Bhindi/cowpea	Sowing		-Proper drainage should be given to drain excess water -Sowing should be done in permissible field condition.
Allium odorosum			<ul> <li>-Plantation of <i>Allium odorosum</i> (Maroi nakuppi).</li> <li>-High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6".</li> <li>-Coriander seed may also be sown in between the Allium Species as an intercrop.</li> </ul>



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



		ement of		-Jungle cutting and preparation of pit for planting/transplanting of these fruit	
		pla		plants should be started. Pit preparation should be done atleast 1 month ahead of planting.  Procure quality planting material	
Animal Science	es				
Name of the animal	Growt	h stage	Disease/ infestation		Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		Care & management		- To protect from dehydration, provision for wholesome and clear water (cool) be maintained properly atleast four times during the day.
Sheep/ Goat					- Pepirazine compound- 100mg/kg orally for 3 days.
			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age		Deworming		-Give Morantel citrate tablet @ 15 mg/kg of body weight.
excepts the young ones			Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Hog Cholera		-Vaccination against swine fever must be carried out.
ex	All age		B.Q./ H.S/FMD		-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
	young ones		Ectoparasitism		- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
			Endoparasites		- Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
			Fodder crops		-Maize should be sown for use as green fodderNapier/Guinea grass may be transplantedSilage can be prepared.
			Puerperal Fever in Pregnant animals		-50-60 gram of mineral mixture every day.
			Decrease in mi	k production	-The milk & urine samples must be sent for testing.
	Breedal	ble age	Controlled breeding		-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow		Mastitis		-To prevent mastitis they should be milked completely.
Fishery:	1				
Type of Farming	Stage		Management		-metrological advisories
Carp culture	Fries/ fingerlings		Pond and water	-Appl	tain minimum depth of $1.5 - 2.0$ m by filling fresh and clean water. y Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
	broode	rs	Feed		de feed 1-2 times @ 2 % body weight per day.
			Fish	progra	e and female brooders should be stock in separate ponds for early breeding ams for Common Carp.
			- Harvest		vesting of fish may be done in area where water availability is low.