

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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Bishnupur (8 <sup>th</sup> to 12 <sup>th</sup>
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of 24.0 - 30.0 °C and minimum temp. of 15.0 – 17.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 90 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
		eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting) - Transplanting		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/	Planting		- Transplanting may be done in upland area.
Orange/ Lime/ Lemon/ other			
fruit plants			
Animal Science	es		
		birds and animal sheds	to avoid water logging as mosquitoes breeding may take place in it. Also, take
care that there is			water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
	-		use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q.</b> and <b>H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
			hills/ upland areas, as the spores causing B.Q. are abundantly present in it.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
	All susceptible	Coccidiosis	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking
	age groups		<i>water</i> ) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
			Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries	1	1	r / Proved A on Amm
	rate rainfall water s	hould not be allowed to d	rain directly into the ponds as it may contaminate with unwanted elements.
			onth. Also, encircle the ponds us it may containing with anwanted elements.
water overflows d			

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	• Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			<ul> <li>Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both</li> </ul>
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Chandel (8 <sup>th</sup> to 12 <sup>th</sup>
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of $27.0 - 32.0$ °C and minimum temp. of $17.0 - 21.0$ °C. The maximum RH is likely to attain a max value of 96 % and minimum RH of 86 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
		eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/ Orange/ Lime/ Lemon/ other	Planting		- Transplanting may be done in upland area.
fruit plants			
Animal Science		hinda and animal shada	to avoid water logging as mosquitoes breeding may take place in it. Also, take
			water must be provided and de-worming must be done.
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal	Growth stage	Disease/ intestation	Agro-meteorological auvisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
-	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
			use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q.</b> and <b>H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
		- FMD	hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
- • • • • • • •	All susceptible	Coccidiosis	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking
	age groups		<i>water</i> ) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		C	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries		1	
	rate rainfall. water sh	ould not be allowed to d	rain directly into the ponds as it may contaminate with unwanted elements.
			onth. Also, encircle the pond with nylon net to prevent the escape of fishes if pond

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			• Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Churachandpur (8 <sup>th</sup> to
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	12 <sup>th</sup> May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of $23.0 - 31.0$ °C and minimum temp. of $17.0 - 19.0$ °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 91 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul> <li>Weeding may be done after the wet spell.</li> <li>Top dressing may be done when the plants is knee high.</li> </ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
		eavy rains in next five	days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/ Orange/ Lime/ Lemon/ other fruit plants	Planting		- Transplanting may be done in upland area.
Animal Science	es		
		birds and animal sheds	to avoid water logging as mosquitoes breeding may take place in it. Also, take
			g water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
-	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
	-		use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
		- FMD	hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <b>Ranikhet disease</b> but deworm before
Poultry			vaccination.
e e	All susceptible	Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking
	age groups		water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		-	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries			
* In case of model	rate rainfall, water sl	nould not be allowed to a	lrain directly into the ponds as it may contaminate with unwanted elements.
			onth. Also, encircle the pond with nylon net to prevent the escape of fishes if pond
water overflows d	ue to heavy rains.		

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	• Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen
			level should be 6-8 ppm.
			Hatching can be done in traditional hapas having outer & inner hapas or
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Imphal - East (8 <sup>th</sup> to
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	12 <sup>th</sup> May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of 24.0 - 28.0 °C and minimum temp. of 13.0 – 16.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 95 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
* As there is fore	ecast of moderate to h	eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting) - Transplanting		- As the field conditions do not permit for transplanting of seedlings. If the
	- mansplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/	Planting		- Transplanting may be done in upland area.
Orange/ Lime/ Lemon/ other			
fruit plants			
Animal Science	es		
		birds and animal sheds	to avoid water logging as mosquitoes breeding may take place in it. Also, take
care that there is	no water leakage in t	he sheds. Clean drinking	water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
C	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
	0		use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q. and H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
			hills/ upland areas, as the spores causing B.Q. are abundantly present in it.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
	All susceptible	Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking
	age groups		<i>water</i> ) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		U	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries	1	1	
	rate rainfall, water sh	hould not be allowed to a	lrain directly into the ponds as it may contaminate with unwanted elements.
			onth. Also, encircle the pond with nylon net to prevent the escape of fishes if pond
water overflows d			
J	/		

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	• Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			• Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

## MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Imphal - West (8 <sup>th</sup> to
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	12 <sup>th</sup> May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of $25.0 - 29.0$ °C and minimum temp. of $14.0 - 16.0$ °C. The maximum RH is likely to attain a max value of 100 % and minimum RH of 94 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.

## Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
* As there is fore	ecast of moderate to h	eavy rains in next five	days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





# "Integrated Agromet Advisory Services"

Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
-	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/ Orange/ Lime/ Lemon/ other fruit plants	Planting		- Transplanting may be done in upland area.
Animal Science	es		
		birds and animal sheds	to avoid water logging as mosquitoes breeding may take place in it. Also, take
			g water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
			use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) i
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
		- FMD	hills/ upland areas, as the spores causing B.Q. are abundantly present in it.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
	All susceptible	Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking
	age groups		water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		-	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
			· ·

\* If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen
			level should be 6-8 ppm.
			Hatching can be done in traditional hapas having outer & inner hapas or
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Senapati (8 <sup>th</sup> to 12 <sup>th</sup>
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of 22.0 - 28.0 °C and minimum temp. of 13.0 – 17.0 °C. The maximum RH is likely to attain a max value of 98 % and minimum RH of 86 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	Crops		
* As there is for	ecast of moderate to h	eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





# "Integrated Agromet Advisory Services"

Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/ Orange/ Lime/ Lemon/ other	Planting		- Transplanting may be done in upland area.
fruit plants			
Animal Science	es		
* Provide proper	drainage around the	birds and animal sheds	to avoid water logging as mosquitoes breeding may take place in it. Also, take
	no water leakage in t	he sheds. Clean drinking	g water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
	-		use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q.</b> and <b>H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
			hills/ upland areas, as the spores causing B.Q. are abundantly present in it.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
-		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
· · ·	All susceptible	Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking
	age groups		<i>water</i> ) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		There Bernond	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
	l	1	F

\* If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Tamenglong (8 <sup>th</sup> to 12 <sup>th</sup>
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of $26.0 - 31.0$ °C and minimum temp. of $16.0 - 19.0$ °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 91 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
* As there is fore	ecast of moderate to h	eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/	Planting		- Transplanting may be done in upland area.
Orange/ Lime/			
Lemon/ other fruit plants			
Animal Science	es		
		birds and animal sheds t	o avoid water logging as mosquitoes breeding may take place in it. Also, take
	no water leakage in t	he sheds. Clean drinking	water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm
C	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
	C		use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q. and H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
			hills/ upland areas, as the spores causing B.Q. are abundantly present in it.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <b>Ranikhet disease</b> but deworm before
Poultry			vaccination.
•	All susceptible	Coccidiosis	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking
	age groups		water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		C C	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries	1	1	
	rate rainfall, water sh	ould not be allowed to d	rain directly into the ponds as it may contaminate with unwanted elements.
			<i>with Also, encircle the pond with nylon net to prevent the escape of fishes if pond</i>
	ue to heavy rains.		in the coupe of function of points of points of points of points

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			• Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Thoubal (8 <sup>th</sup> to 12 <sup>th</sup>
Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of 24.0 - 29.0 °C and minimum temp. of 14.0 - 16.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 92 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.</li> </ul>
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	rops		
* As there is fore	ecast of moderate to h	eavy rains in next five	days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/	- For standing crop		- Proper drainage should be made to prevent water logging as water logging
brinjal	in field (vegetative		for more than 48 hrs is highly detrimental to plant growth.
	to fruiting)		- As the field conditions do not permit for transplanting of seedlings. If the
	- Transplanting		seedlings are in the stage ready for transplanting then it may be planted in
			secondary nursery or polybags. They may be shifted when the field is ready.
			This practice will avoid adverse effect on plant due to late transplanting.
Tree bean/ Orange/ Lime/ Lemon/ other	Planting		- Transplanting may be done in upland area.
fruit plants			
Animal Science		hinda and animal shada	to avoid water logging as mosquitoes breeding may take place in it. Also, take
			water must be provided and de-worming must be done.
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal	Growth stage	Disease/ intestation	Agro-meteorological auvisories
Pig	Above 3 months	- Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm
-	of age		using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't
			use Korean strain vaccine.
		- FMD	- Vaccinate all the susceptible animals against the FMD.
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/	All age groups	- B.Q. and	- Vaccination of <b>B.Q.</b> and <b>H.S.</b> polyvalent (dose as per recommendation) is
Mithun	except three	Haemorrhagic	advised but deworm with appropriate agent before vaccination.
	months or below	Septicaemia	- Check that the animals do not drink the water that has been drained from
		- FMD	hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before
Poultry			vaccination.
- • • • • • • •	All susceptible	Coccidiosis	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking
	age groups		<i>water</i> ) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly.
		C	Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide
			clean & safe drinking water by adding Sokrena (scnitizer) to avoid
			<i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging
			polythene sheet to protect from rain.
Fisheries		1	
	rate rainfall. water sh	ould not be allowed to d	rain directly into the ponds as it may contaminate with unwanted elements.
			onth. Also, encircle the pond with nylon net to prevent the escape of fishes if pond

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals
			with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in
			ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.
			Spray CIFAX on the surface of the pond water. Male and female brooders
			must be kept in separate tanks.
	Breeding	pond	Pond should be free from silt, weeds, insects and other unwanted fishes.
			• p <sup>H</sup> of water must be maintained at 7.0-8.0
			• Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both
			the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen</li> </ul>
			level should be 6-8 ppm.
			<ul> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or</li> </ul>
			circular hatcheries. A mild current with fine shower is needed for circular
			hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be
			more than 1.0 m. Feeding should be given@5-10% body weight/day.



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



# "Integrated Agromet Advisory Services"

# MANIPUR BULLETIN 7<sup>th</sup> May, 2013

### 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 8<sup>th</sup> to 12<sup>th</sup> May, 2013 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (3 <sup>rd</sup> to 6 <sup>th</sup> May, 2013)	Weather forecast for next five days of Ukhrul (8 <sup>th</sup> to 12 <sup>th</sup> May, 2013)
During the past four days the sky was partly cloudy to cloudy. <b>93.1</b> mm rainfall was recorded during past four days. Maximum temperature range observed was $17.9 - 26.6$ °C, range of minimum temperature observed was $15.1 - 16.1$ °C, mean relative humidity observed in morning and afternoon were 94.5 % and 82.5 % respectively. The average wind speed range was $1.6 - 2.7$ km/hr.	It is likely to have moderate to heavy rains during next five days. The sky is likely to be partly cloudy to cloudy with maximum temp. of 22.0 - 27.0 °C and minimum temp. of 12.0 – 16.0 °C. The maximum RH is likely to attain a max value of 96 % and minimum RH of 82 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.

### Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> May, 2013)

Rain/thundershowers would occur at many places over northeastern states

#### Weather warning during next 3 days

Thundersquall would occur at one or two places over Manipur during next 48 hrs

## Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> May, 2013

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Vegetative		<ul> <li>Drain out excess water from the crop field. Maintain water depth of 5-8 cm.</li> <li>Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for for first begins and nearly 48 hrs is required for</li> </ul>
	Kharif		fertilizers to get absorbed in the soil. Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		<ul><li>Weeding may be done after the wet spell.</li><li>Top dressing may be done when the plants is knee high.</li></ul>
	Vegetative to cob formation		<ul><li>Weeding may be done after the wet spell.</li><li>Maintain proper drainage system.</li></ul>
Soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing. It should be made weed free before sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture C	Crops		
* As there is for	ecast of moderate to h	eavy rains in next five	e days field operations may be taken up after 2-3 days after this wet spell.
Ginger & turmeric	Planting to early vegetative		<ul> <li>If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.</li> <li>Provide proper drainage to avoid water logging in crop.</li> </ul>
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trill may be made. Avoid fruits to touch ground.





Chilli/ tomato/ brinjal	- For standing crop in field (vegetative		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth.
UI IIIJAI	to fruiting) - Transplanting		<ul> <li>As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.</li> </ul>
Tree bean/ Orange/ Lime/ Lemon/ other fruit plants	Planting		- Transplanting may be done in upland area.
Animal Science	es		·
* Provide proper	drainage around the		to avoid water logging as mosquitoes breeding may take place in it. Also, take g water must be provided and de-worming must be done.
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD	<ul> <li>Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine.</li> <li>Vaccinate all the susceptible animals against the FMD.</li> </ul>
		- Diarrhoea	- Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	<ul> <li>Vaccination of <i>B.Q. and H.S.</i> polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.</li> <li>Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it.</li> <li>Vaccinate all the susceptible animals against the FMD.</li> </ul>
Poultry		Ranikhet Disease	- Birds should be vaccinated against <i>Ranikhet disease</i> but deworm before vaccination.
	All susceptible age groups	Coccidiosis	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scnitizer) to avoid <i>Colebacilliosis</i> . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.
Fisheries			
	s occurred then apply		lrain directly into the ponds as it may contaminate with unwanted elements. onth. Also, encircle the pond with nylon net to prevent the escape of fishes if pond

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	<ul> <li>Agro-Inter original advisories</li> <li>Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran &amp; oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits.</li> <li>Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.</li> </ul>
	Breeding	pond	<ul> <li>Pond should be free from silt, weeds, insects and other unwanted fishes.</li> <li>p<sup>H</sup> of water must be maintained at 7.0-8.0</li> <li>Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.</li> </ul>
	Hatcheries	water	<ul> <li>Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm.</li> <li>Hatching can be done in traditional hapas having outer &amp; inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.</li> </ul>
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.