



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 27.0 - 31.0 °C. The minimum temp. is likely to be 10.0 – 13.0 °C. The maximum RH is likely to attain a max value of 78 %. Minimum RH is likely to reach a max of 57 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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**Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

AMFU- Imphal Unit



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 29.0 - 32.0 °C. The minimum temp. is likely to be 10.0 – 14.0 °C. The maximum RH is likely to attain a max value of 72 %. Minimum RH is likely to reach a max of 40 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery: <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

AMFU- Imphal Unit



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 26.0 - 30.0 °C. The minimum temp. is likely to be 9.0 – 12.0 °C. The maximum RH is likely to attain a max value of 81 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>





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



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

AMFU- Imphal Unit



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 28.0 - 31.0 °C. The minimum temp. is likely to be 9.0 – 12.0 °C. The maximum RH is likely to attain a max value of 77 %. Minimum RH is likely to reach a max of 63 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery: <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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**Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

AMFU- Imphal Unit





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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 26.0 - 30.0 °C. The minimum temp. is likely to be 9.0 – 13.0 °C. The maximum RH is likely to attain a max value of 82 %. Minimum RH is likely to reach a max of 61 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 25.0 - 29.0 °C. The minimum temp. is likely to be 7.0 – 10.0 °C. The maximum RH is likely to attain a max value of 79 %. Minimum RH is likely to reach a max of 69 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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Cucurbits	Vegetative		<ul style="list-style-type: none"><li>- Adequate manuring and fertilization should be given.</li><li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li><li>- Weeding/ inter-culture operation and top dressing may be done.</li><li>- In vegetative stage, staking/ support should be provided.</li></ul>
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
Cattle / Buffalo/ Mithun	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry		Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
	All susceptible age groups	Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 29.0 - 31.0 °C. The minimum temp. is likely to be 10.0 – 13.0 °C. The maximum RH is likely to attain a max value of 75 %. Minimum RH is likely to reach a max of 59 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>





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



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 27.0 - 30.0 °C. The minimum temp. is likely to be 9.0 – 12.0 °C. The maximum RH is likely to attain a max value of 73 %. Minimum RH is likely to reach a max of 51 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Cucurbits</b>	Vegetative		<ul style="list-style-type: none"> <li>- Adequate manuring and fertilization should be given.</li> <li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li> <li>- Weeding/ inter-culture operation and top dressing may be done.</li> <li>- In vegetative stage, staking/ support should be provided.</li> </ul>
<b>Potato</b>	Tuber development to		<ul style="list-style-type: none"> <li>- Light irrigation may be given.</li> <li>- Incidence of late blight may be observed with rains. If observed, spray Redomil MZ @ 2g/ lit of water.</li> </ul>

**Animal Sciences**

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Pig</b>	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
<b>Goat</b>	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
<b>Poultry</b>	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days

**Fisheries**

Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

AMFU- Imphal Unit



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**19<sup>th</sup> March, 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 20<sup>th</sup> to 24<sup>th</sup> March, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (15<sup>th</sup> to 18<sup>th</sup> March, 2013)</u></p> <p>During the past four days the sky was mainly clear to partly cloudy but mainly cloudy during afternoon hours of 15<sup>th</sup> and morning hours of 18<sup>th</sup> March. 4.0 mm rainfall was recorded during past four days. Maximum temperature range observed was 24.9 – 31.4 °C, range of minimum temperature observed was 12.1 – 13.7 °C, mean relative humidity observed in morning and afternoon were 76.5 % and 32.8 % respectively. The average wind speed range was 2.8 – 6.8 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (20<sup>th</sup> to 24<sup>th</sup> March, 2013)</u></p> <p>There is likely to have light rain during next five days. The sky is likely to be partly cloudy during next five days. The maximum temp. is likely to be 25.0 - 29.0 °C. The minimum temp. is likely to be 7.0 – 10.0 °C. The maximum RH is likely to attain a max value of 74 %. Minimum RH is likely to reach a max of 48 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Pre- Kharif rice		<ul style="list-style-type: none"> <li>* Maintain 3-4 inches of water level in those fields in which seedlings from dry nursery was transplanted.</li> <li>* In wet nursery:               <ul style="list-style-type: none"> <li>- Uprooting of seedlings may be done when seedlings are 30-45 days old.</li> <li>- Land preparation of main field for transplanting may be done.</li> </ul> </li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- 60 kg of Nitrogen fertilizer per ha is recommended at the time of inter-culture operation at knee-high stage.</li> </ul>
<b>Rapeseed</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Mature crop (when 75% of crops turn yellow) may be harvested. After harvesting, it must be sun dried for 2-3 days and threshed. Cleaned seeds must be packed and stored in wooden rack.</li> </ul>
<b>Field Pea</b>	Pod filling to maturity		<ul style="list-style-type: none"> <li>- Pea may be harvested for use as vegetable. Healthy mature pods may be retained for seeds.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Turmeric/ Ginger</b>	Rhizome selection & sowing		<ul style="list-style-type: none"> <li>- Prepare the bed thoroughly. Apply 20 cartloads of FYM/ sangam while preparing land.</li> <li>- Sort out healthy disease free rhizome seed from store/ pit and spread them in airy shed for 2-3 days. Treat them with Carbendazim and also with an insecticide before sowing. Let it dry (in case of wet solution treatment). As the weather is dry, sowing may be done as soon as the bed is ready followed by mulching.</li> <li>- Maintain 3-4 inches depth while sowing. Rhizome finger 25-30 gm with 2-3 buds may be sown. Mother rhizome can also be used as seed by cutting into pieces with 2-3 buds.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation		<ul style="list-style-type: none"> <li>- Most of crops are now in bulb formation stage. During this stage, water is very crucial hence irrigation may be provided. Do not uproot plant even if 25% of the leaves have dried in those areas where there was lack of water. Mulching in between rows using dried twigs/ paddy straw/ dry leaves or harvest remains of crop like cabbage/cauliflower/ pea or rapeseed is advised.</li> <li>- Pinch off the flower bud as soon as it develops.</li> </ul>



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Cucurbits	Vegetative		<ul style="list-style-type: none"><li>- Adequate manuring and fertilization should be given.</li><li>- 30 days old seedlings being transplanted (nursery from pro-tray/ polythene bags) need support for staking.</li><li>- Weeding/ inter-culture operation and top dressing may be done.</li><li>- In vegetative stage, staking/ support should be provided.</li></ul>
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose.
Cattle / Buffalo/ Mithun	All age groups except three months or below	Black leg and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised.
Goat	All susceptible age groups	B.Q. and H.S.	- Vaccination of B.Q. and H.S. (dose as per recommendation) is advised.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Coximar (@ 2g/lit of drinking water) for 5 to 7 days
Fisheries			
Type of Farming	Stage	Field	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Water depth should be maintained at 1.5 - 2.0 m
		Feed	Feeds should be provided 2 times a day @ 2-3% body weight per day.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
		Feed	Feed should be provided @ 1-2% body weight per day. Feed can be fed 2 times a day.
	Breeding	pond	Pond should be free from insects, predators, aquatic weeds etc. Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp.
	Nurseries	ponds	Water depth should be maintained at 1.0m After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

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