



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Bishnupur (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 32.0 °C & minimum temp. 9.0 – 11.0 °C. Relative Humidity may reach a maximum of 76 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Chandel (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 33.0 °C & minimum temp. 10.0 – 12.0 °C. Relative Humidity may reach a maximum of 65 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 4-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

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The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Churachandpur (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 33.0 °C & minimum temp. 10.0 – 13.0 °C. Relative Humidity may reach a maximum of 81 % (maximum RH) & 21 % (minimum RH). The average wind speed may be 4-6 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

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Weather forecast for next five days of Imphal - East (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 33.0 °C & minimum temp. 10.0 – 12.0 °C. Relative Humidity may reach a maximum of 92 % (maximum RH) & 24 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Imphal - West (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 31.0 - 34.0 °C & minimum temp. 9.0 – 11.0 °C. Relative Humidity may reach a maximum of 90 % (maximum RH) & 23 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Senapati (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 27.0 - 30.0 °C & minimum temp. 7.0 – 10.0 °C. Relative Humidity may reach a maximum of 87 % (maximum RH) & 24 % (minimum RH). The average wind speed may be 2 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Tamenglong (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 31.0 - 34.0 °C & minimum temp. 11.0 – 14.0 °C. Relative Humidity may reach a maximum of 82 % (maximum RH) & 22 % (minimum RH). The average wind speed may be 3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.

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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Thoubal (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 - 32.0 °C & minimum temp. 10.0 – 13.0 °C. Relative Humidity may reach a maximum of 76 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 2-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Ginger/ turmeric</b>	Planting		<ul style="list-style-type: none"> <li>- While preparing land for planting ginger/ turmeric apply 1 t FYM, 65 kg Urea, 375 kg SSP and 80 kg MOP.</li> <li>- Recommended varieties:               <ul style="list-style-type: none"> <li>For turmeric: Megha turmeric</li> <li>For ginger: Nadia</li> </ul> </li> <li>- Use healthy mother rhizome of 25-30g weight and plant at a spacing of 1 ft x 1 ft. Treat the seed rhizome with Captan (@ 2g/ lit water) or Mencozeb (@ 3g/ lit of water) for 15-20 minutes and keep under shed before planting.</li> </ul>
<b>French Bean</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Apply 12-13 kg Urea, 12-15 kg SSP and 40-45 kg MOP per ha at the time of sowing.</li> <li>- Maintain optimum soil moisture.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Poultry</b>	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> <li>1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular).</li> <li>2. R<sub>2</sub>B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird).</li> <li>3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).</li> </ol>
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
		H.S.	Vaccinate against Haemorrhagic Septicaemia.
		B.Q.	Vaccinate against Black Quarter.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
			- Administer Minamil powder @ 15-20g/ day in feed.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	FMD	Vaccinate against Foot and mouth disease.
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(I. Meghachandra Singh)  
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**MANIPUR BULLETIN**

**14<sup>th</sup> March, 2014**

**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 15<sup>th</sup> to 19<sup>th</sup> March, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (11<sup>th</sup> to 13<sup>th</sup> March, 2014)

The sky was partly cloudy to mainly cloudy. **No** rainfall was recorded during past three days. Maximum temperature range observed was 26.1 – 27.6 °C, range of minimum temperature observed was 6.8 – 10.0 °C, mean relative humidity observed in morning and afternoon were 81.3 % and 37.3 % respectively. The average wind speed range was 3.9 – 5.1 km/hr.

Weather forecast for next five days of Ukhrul (15<sup>th</sup> to 19<sup>th</sup> March, 2014)

Light rain is predicted on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 27.0 - 29.0 °C & minimum temp. 6.0 – 9.0 °C. Relative Humidity may reach a maximum of 68 % (maximum RH) & 25 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Nursery and main field preparation		<ul style="list-style-type: none"> <li>- Maintain optimum water level in nursery.</li> <li>- If yellowing of leaves of seedlings is observed, spray Chloropyriphos 0.05% @ 2ml/lit water to control plant hopper.</li> <li>- Before first ploughing of main field, apply well decomposed FYM @ 10-15 t/ha. After a cross plough, irrigate the field to 5-7 cm depth. Submerge soil for 15-20 days before planting to obtain weed free plot.</li> <li>- At the time of final leveling, apply 97 kg Urea, 87Kg DAP and 45 Kg MOP per ha.</li> </ul>
<b>Rapeseed/ Mustard</b>	Harvesting to post-harvesting		<ul style="list-style-type: none"> <li>- Dry the harvest for 5-6 days in sun and thresh. Clean the seeds thoroughly and store after proper drying.</li> </ul>
<b>Rabi Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Irrigate to maintain required soil moisture during this phase.</li> </ul>
		Stem borer	<ul style="list-style-type: none"> <li>- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.</li> </ul>
<b>Storage</b>			<ul style="list-style-type: none"> <li>- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. After proper drying, store grains/ seeds in well ventilated godowns.</li> <li>- Rodent management should be done in and around godowns.</li> </ul>
<b>Horticulture Crops</b>			
<b>Tomato</b>	Vegetative	Early blight	<ul style="list-style-type: none"> <li>- Apply Dithane M-45 @ 2gm/ lit of water twice at 7 days interval as a prophylactic measure against early blight.</li> <li>- After 30 days of transplanting apply Urea @ 50-60 kg /sangam as top dressing.</li> </ul>
<b>Onion/ Garlic</b>	Bulb formation	leaf minor	<ul style="list-style-type: none"> <li>- During the bulb formation stage, check that the neck portion is not covered with soil.</li> <li>- Light hoeing and irrigation is necessary to keep soil moist during this phase.</li> <li>- Spray Dichlorovos 36 EC @ 0.5ml/lit of water or Monocrotophos 76EC @ 1ml/lit of water to protect the crop from infestation of leaf minor. Spray is to be given twice or thrice at an interval of 7 to 10 days.</li> </ul>
		Purple bloch and bulb rot	<ul style="list-style-type: none"> <li>- Spray Sixer @ 2 gm/lit of water as prophylactic measure against Purple bloch and Bulb rot. Spray is to be given twice at an interval of 7 to 10 days.</li> </ul>
<b>Fruit Crops</b>	Vegetative		<ul style="list-style-type: none"> <li>Provide life saving irrigation to passion fruit, pineapple and other fruit crops. Use dry grass or twigs as mulching material at the basin to conserve the soil moisture.</li> </ul>



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