



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 26.0 – 28.0 °C & minimum temp. 10.0 – 11.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 62 % (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>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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



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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 26.0 – 29.0 °C & minimum temp. 9.0 – 11.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 76 % (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>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 25.0 – 27.0 °C & minimum temp. 9.0 – 10.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 55 % (minimum RH). The average wind speed may be 2-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.





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**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

(I. Meghachandra Singh)  
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**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 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> November, 2014)**

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 27.0 – 28.0 °C & minimum temp. 10.0 – 11.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 52 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

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Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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





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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 26.0 – 28.0 °C & minimum temp. 10.0 – 12.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 49 % (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>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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



**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 23.0 – 25.0 °C & minimum temp. 7.0 – 9.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 47 % (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>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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



**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 9.0 – 11.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 49 % (minimum RH). The average wind speed may be 2-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.





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



**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 10.0 – 12.0 °C. Relative humidity may reach upto 100 % (maximum RH) & 70 % (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>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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



**“Integrated Agromet Advisory Services”**

<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

Type of Farming	Stage & Management	Agro-metrological advisories
<b>Carp/ Catfish culture</b>	Harvesting and stock maintenance	<ul style="list-style-type: none"> <li>- Fish harvesting can be done.</li> <li>- Stock fish for next year and for this practices mentioned below may be done in small scale.</li> <li>- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0 - 1.5m.</li> <li>- Feeds should be provided 1-2 times a day @ 3 % body weight per day.</li> <li>- Well balanced feed fortified with vitamins and minerals should be provided.</li> <li>- Apply Green AQ @ 4litre/ ha or lime @ 200kg/ ha. Maintain good quality of pond water.</li> </ul>

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



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**14<sup>th</sup> November, 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> November, 2014 as given below:

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

During past three days sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 28.7 – 29.4 °C, range of minimum temperature observed was 11.5 – 13.2 °C, mean relative humidity observed in morning and afternoon were 82.6 % and 52.0 % respectively. The average wind speed range was 1.2 – 1.5 km/hr.

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

There may be no rain upto Wednesday. Sky may be mainly clear to partly cloudy with maximum temp. of 22.0 – 25.0 °C & minimum temp. 6.0 – 9.0 °C. Relative humidity may reach upto 99 % (maximum RH) & 63 % (minimum RH). The average wind speed may be 3-4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Post harvesting		- Clean and sundry seeds properly before storage.
<b>Rapeseed/ mustard</b>	Sowing		- Zero tillage rape seed may be sown. Recommended variety – M-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mencozeb @2g/kg seed for the control of white rust and downey mildew at seedling stage. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing.
<b>Field pea</b>	Sowing		Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.
<b>Potato</b>	Planting of tubers seeds		- Land preparation may be done. Sowing may be done at a spacing of 60cm X 15-20cm. - Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. - Treat the seed with Captan or Sixer@ 2 gm/litre of water for about half hour. - Incubation of seeds in the sand bed for at about 7-10 days for sprouting of seed is also advisable. Sow seed at about 3 inch depth.
<b>Storage</b>			- 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.
<b>Horticulture Crops</b>			
* Apply <i>Chloropyrifos (1.5%) dust</i> @25 kg /ha to the cauliflower/ cabbage infested by cut-worms.			
<b>Garden Pea</b>	Land preparation		To avoid premature/ yellowing of lower leaves and incomplete filling of pods, apply Carbendazim. If the problem was there in last year, then follow crop rotation. Land must be ploughed properly.
<b>Cauliflower</b>	Transplanting		- Transplanting of 25-30 days old seedlings may be continued. - Apply Tracel @ 300gm/sangam in 30-35days old cauliflower to avoid leaf curling, development of purple coloured vein due to absence of micronutrient. If required repeat it after 10 days.
<b>Coriander</b>	Land preparation & sowing		- Select area with bright sunshine rich in organic manure for preparing beds. Treat soil using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 sq. m and mix thoroughly to improve soil fertility. - Seed rate is 100g seeds for 100 sq. m.



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<b>Spinach beet (Palak)</b>	Land preparation & sowing		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>
<b>Onion</b>	Nursery raising		<ul style="list-style-type: none"> <li>- Apply Captan 50 WP during final land preparation as preventive measures against soil borne diseases.</li> <li>- For 25 sq m area we need ½ kg seeds.</li> <li>- check that the new sprouts/ young plants in nursery beds are not damaged.</li> <li>- 45-60 days old seedlings may be transplanted.</li> </ul>

**Animal Sciences**

\*Take up measures to avoid mosquitoes in and around the sheds of birds and animals.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
<b>Poultry</b>	All susceptible age groups (as and when required)	Coccidiosis	Give preventive dose of Coximar @ 1g/ lit of drinking water for 7 days along with glucose.
		Deworming	Use Ventrizole @ 1g in 1 litre of drinking water for 3 days.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	Tetanus	- In pregnant animals, inject Tetanus Toxoid @ 0.5ml at 3.5 months of pregnancy.
		Deworming	- Give Albomic suspension @ 5ml per adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Skin infection	Give Ivermectin (Indectin tab.) @ 10mg/33kg body weight.
		Coccidial infection (Diarrhea)	Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		Deworming	- Deworm using Piperazine citrate @ 30 ml per adult animal once.
		Ticks	Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	Fasciolosis	- Give Tolzan-F @30 ml/ 100 kg body weight.
		Deworming	Give Nilzan/ Tolzan- F @ 30ml/ 100 kg body weight.
		Ticks/ Wounds	Topicure Spray may be used twice daily on the affected parts.

**Fishery:**

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