



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)</u></p>	<p><u>Weather forecast for next five days of Churachandpur (26<sup>th</sup> to 30<sup>th</sup> April, 2014)</u></p>
<p>The sky was mainly clear to partly cloudy. <b>No</b> rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.</p>	<p>It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 31.0 – 34.0 °C &amp; minimum temp. 13.0 - 16.0 °C. Relative Humidity may reach a maximum of 94 % (maximum RH) &amp; 30 % (minimum RH). The average wind speed may be 4-6 km/hr during next five days.</p>

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		<ul style="list-style-type: none"> <li>- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done.</li> <li>- As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.</li> </ul>
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		<ul style="list-style-type: none"> <li>- Irrigate the crop field if required.</li> </ul>
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		<ul style="list-style-type: none"> <li>- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.</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>Mandarin &amp; Lemon</b>			<p>For grown up Mandarin apply 500g Urea, 1kg SSP &amp; 400g MOP per plant along with 30 kg cowdung manure compost.</p> <p>For grown up Lemon apply 350g Urea, 400g SSP &amp; 300g MOP along with 30 kg cowdung manure compost per plant.</p>
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)</u></p>	<p><u>Weather forecast for next five days of Imphal - East (26<sup>th</sup> to 30<sup>th</sup> April, 2014)</u></p>
<p>The sky was mainly clear to partly cloudy. <b>No</b> rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.</p>	<p>It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 31.0 – 33.0 °C &amp; minimum temp. 14.0 - 15.0 °C. Relative Humidity may reach a maximum of 96 % (maximum RH) &amp; 36 % (minimum RH). The average wind speed may be 4-7 km/hr during next five days.</p>

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		<ul style="list-style-type: none"> <li>- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done.</li> <li>- As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.</li> </ul>
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		<ul style="list-style-type: none"> <li>- Irrigate the crop field if required.</li> </ul>
	Sowing		<p>Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.</p>
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		<ul style="list-style-type: none"> <li>- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.</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>Mandarin &amp; Lemon</b>			<p>For grown up Mandarin apply 500g Urea, 1kg SSP &amp; 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP &amp; 300g MOP along with 30 kg cowdung manure compost per plant.</p>
<b>Passion fruit</b>			<p>Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with</p>



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)

The sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.

Weather forecast for next five days of Imphal - West (26<sup>th</sup> to 30<sup>th</sup> April, 2014)

It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 13.0 - 15.0 °C. Relative Humidity may reach a maximum of 97 % (maximum RH) & 36 % (minimum RH). The average wind speed may be 5-8 km/hr during next five days.

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done. - As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		- Irrigate the crop field if required.
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.
<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. - Rodent management should be done in and around godowns.
<b>Horticulture Crops</b>			
<b>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)

The sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.

Weather forecast for next five days of Senapati (26<sup>th</sup> to 30<sup>th</sup> April, 2014)

It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 – 33.0 °C & minimum temp. 12.0 - 15.0 °C. Relative Humidity may reach a maximum of 91 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done. - As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		- Irrigate the crop field if required.
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.
<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. - Rodent management should be done in and around godowns.
<b>Horticulture Crops</b>			
<b>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)

The sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.

Weather forecast for next five days of Tamenglong (26<sup>th</sup> to 30<sup>th</sup> April, 2014)

It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 32.0 – 35.0 °C & minimum temp. 14.0 - 17.0 °C. Relative Humidity may reach a maximum of 96 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 3-7 km/hr during next five days.

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done. - As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		- Irrigate the crop field if required.
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.
<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. - Rodent management should be done in and around godowns.
<b>Horticulture Crops</b>			
<b>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)

The sky was mainly clear to partly cloudy. No rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.

Weather forecast for next five days of Thoubal (26<sup>th</sup> to 30<sup>th</sup> April, 2014)

It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 31.0 – 34.0 °C & minimum temp. 13.0 - 15.0 °C. Relative Humidity may reach a maximum of 94 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done. - As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		- Irrigate the crop field if required.
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.
<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. - Rodent management should be done in and around godowns.
<b>Horticulture Crops</b>			
<b>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)</u></p>	<p><u>Weather forecast for next five days of Ukhrul (26<sup>th</sup> to 30<sup>th</sup> April, 2014)</u></p>
<p>The sky was mainly clear to partly cloudy. <b>No</b> rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.</p>	<p>It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 29.0 – 32.0 °C &amp; minimum temp. 12.0 - 15.0 °C. Relative Humidity may reach a maximum of 82 % (maximum RH) &amp; 30 % (minimum RH). The average wind speed may be 4-6 km/hr during next five days.</p>

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		<ul style="list-style-type: none"> <li>- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done.</li> <li>- As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.</li> </ul>
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		<ul style="list-style-type: none"> <li>- Irrigate the crop field if required.</li> </ul>
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		<ul style="list-style-type: none"> <li>- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.</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>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)</u></p>	<p><u>Weather forecast for next five days of Bishnupur (26<sup>th</sup> to 30<sup>th</sup> April, 2014)</u></p>
<p>The sky was mainly clear to partly cloudy. <b>No</b> rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.</p>	<p>It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 30.0 – 33.0 °C &amp; minimum temp. 14.0 - 16.0 °C. Relative Humidity may reach a maximum of 94 % (maximum RH) &amp; 33 % (minimum RH). The average wind speed may be 3-6 km/hr during next five days.</p>

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		<ul style="list-style-type: none"> <li>- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done.</li> <li>- As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.</li> </ul>
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		<ul style="list-style-type: none"> <li>- Irrigate the crop field if required.</li> </ul>
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		<ul style="list-style-type: none"> <li>- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.</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>Mandarin &amp; Lemon</b>			For grown up Mandarin apply 500g Urea, 1kg SSP & 400g MOP per plant along with 30 kg cowdung manure compost. For grown up Lemon apply 350g Urea, 400g SSP & 300g MOP along with 30 kg cowdung manure compost per plant.
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**25<sup>th</sup> April, 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 26<sup>th</sup> to 30<sup>th</sup> April, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (22<sup>nd</sup> to 24<sup>th</sup> April, 2014)</u></p>	<p><u>Weather forecast for next five days of Chandel (26<sup>th</sup> to 30<sup>th</sup> April, 2014)</u></p>
<p>The sky was mainly clear to partly cloudy. <b>No</b> rainfall was recorded during past three days. Maximum temperature range observed was 31.7 – 32.4 °C, range of minimum temperature observed was 13.9 – 14.0 °C, mean relative humidity observed in morning and afternoon were 72.6 % and 40.3 % respectively. The average wind speed range was 6.5 – 7.4 km/hr.</p>	<p>It is likely to have light rain but moderate rain on Tuesday. Sky may be partly cloudy to mainly cloudy with maximum temp. of 32.0 – 34.0 °C &amp; minimum temp. 14.0 - 15.0 °C. Relative Humidity may reach a maximum of 85 % (maximum RH) &amp; 28 % (minimum RH). The average wind speed may be 4-6 km/hr during next five days.</p>

**Main Weather Observations**

Low/medium clouds are seen over some parts of northeastern States.

**Weather Warning during next 3 days \***

Moderate thundersquall would occur at few places over Manipur on 25<sup>th</sup> and 26<sup>th</sup> April.

**Weather Outlook for subsequent 4 days from 28th April 2014 to 02nd May 2014**

Rain/thundershowers would occur at many places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Early kharif rice</b>	Tillering		<ul style="list-style-type: none"> <li>- After 25 days of transplanting, weeding and fertilizer application as top dressing may be done.</li> <li>- As top dressing, apply 24.25kg Urea and 22 kg MOP at 30 to 35 days after transplanting, after complete removal of water.</li> </ul>
<b>Maize</b>	<i>For Rabi Maize</i> Flowering & silking		<ul style="list-style-type: none"> <li>- Irrigate the crop field if required.</li> </ul>
	Sowing		Land preparation for maize cultivation can be started. Apply 60kg of urea, 65kg of DAP and 30 kg of MOP as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
<b>Soybean/ Groundnut/ Blackgram</b>	Land preparation		<ul style="list-style-type: none"> <li>- Apply 10 – 15 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing as basal application during final ploughing. Liming may be done @1t/ha or 250 kg/ sangam for soybean and @ 500 kg/ha or 125 kg/ sangam for groundnut nearly one month before sowing.</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>Mandarin &amp; Lemon</b>			<ul style="list-style-type: none"> <li>For grown up Mandarin apply 500g Urea, 1kg SSP &amp; 400g MOP per plant along with 30 kg cowdung manure compost.</li> <li>For grown up Lemon apply 350g Urea, 400g SSP &amp; 300g MOP along with 30 kg cowdung manure compost per plant.</li> </ul>
<b>Passion fruit</b>			Collection of terminal cuttings (pencil thickness) for passion fruit must be done. Dip the cuttings in 500ppm IBA (IBA 100mg dissolved in 20 ml of distilled water) for 5 mins and place the cutting in polybags filled with



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



**“Integrated Agromet Advisory Services”**

			soil, sand & FYM in the ratio 2:1:1 in slanting position.
<b>Tomato</b>	Flowering and fruiting	Mite	- To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
<b>Cucurbits</b>	Vegetative	Red Pumpkin Beetle	- Use Methyl Euginol as trap @ 4-10 traps/ sangam. <i>Steps to prepare trap:</i> - Cut the ½ litre empty mineral water bottle into two halves. - Mix 2-3 drops of Methyl Euginol in 200ml of water in the lower half, cover the solution with the upper half of the bottle in inverted position so that a funnel like structure is made and beetles are lured. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
		Mite	
<b>Bhindi</b>	Sowing		Bhindi may be sown at the spacing of 30cm X 45cm.
<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	- Vaccinate again all the vaccinated flock using F-1/ Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days. - Vaccinate even in the face of Ranikhet disease outbreak with administration of antibiotic like Salbactum/ Cetriazone, etc. - While giving vaccine, double dose of Lasota strain must be given @ 200 doses for 100 birds either in plain drinking water or along with Amulspray in drinking water @ 6g/ litre of water.
		Deworming	Deworming using Albendazole in drinking water @ 40 ml for 100 birds.
<b>Sheep/ Goat</b>	Above 3 months of age (as and when required)	F.M.D.	- Vaccinate with FMD vaccine sub-cutaneously (s/c) @ 2.5 ml for young ones and 5.0 ml for adult.
<b>Pig</b>	Above 3 months of age (as and when required)	Swine Fever	- SFV (Swine Fever vaccine) @ 1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Ectoparasites	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Cattle / Buffalo/ Mithun</b>	Above 3 months of age (as and when required)	B.Q.	- Vaccinate against Black Quarter. - Out-breaks of Black Quarter has been reported at Tangkham and Sinam village of Imphal-East district. Especially, vaccinate the animals in these areas after consulting doctor/ trained hand.
		Skin infection	- Add Butox @ 2ml in 1 lit of water and brush the animal using the solution, twice a week.
<b>Fishery</b>			
<b>Type of Farming</b>	<b>Stage</b>	<b>management</b>	<b>Agro-metrological advisories</b>
<b>Carp culture</b>	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @ 1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
<b>Paddy cum fish culture</b>	Field		Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.