

“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 24.0 – 31.0 °C. The minimum temp. is likely to be 19.0 – 21.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 87 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		- Sow nursery area of 700 m <sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K <sub>2</sub> O before levelling. -Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.
	Maturity to Harvesting stage (pre-kharif)		- Drain the fields some 10-15 days before the expected harvest date. - Rice can be harvested when 80% of panicles turns hard & golden yellow. Over maturity should be avoided to reduce shattering losses.
<b>Soybean and Groundnut</b>	Sowing to early vegetative		- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm. - Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing. - Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut - In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i> . (Apply after soil testing).
<b>Kharif maize</b>	Vegetative		- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed. - Earthing up and thinning to single plant may be done. - Top dress with 25kg N/ ha at knee high stage of crop.



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



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<b>Storage</b>			<ul style="list-style-type: none"> <li>- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days.</li> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Bhindi</b>	Harvesting		<ul style="list-style-type: none"> <li>- Use neem based pesticides against Jassid.</li> <li>- Harvest fruits frequently. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.</li> </ul>
<b>Tomato</b>	Intercrop with maize		<p>To fetch premium price:</p> <ul style="list-style-type: none"> <li>- grow tomato in raised kharif maize field as an inter-crop in small scale.</li> <li>- it will be useful to produce early and bacterial wilt free quality tomato. Select varieties like Namdhari, Surakha and Arka Sameet.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin, bitter gourd)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> <li>- Provide good drainage around the crop.</li> </ul>
<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>



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<b>Poultry</b>	All susceptible age groups		- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.
		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7 <sup>th</sup> day. - Give R <sub>2</sub> B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly).
			- litter material should be kept dry. - Keep the feed in dry place.
<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

I. Meghachandra Singh  
 Scientist i/c, AMFU- Imphal Unit

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<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light to moderate rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 26.0 – 34.0 °C. The minimum temp. is likely to be 22.0 – 23.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 90 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	Sowing of Main Kharif rice		<ul style="list-style-type: none"> <li>- Sow nursery area of 700 m<sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K<sub>2</sub>O before levelling.</li> <li>-Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.</li> </ul>
	Maturity to Harvesting stage (pre-kharif)		<ul style="list-style-type: none"> <li>- Drain the fields some 10-15 days before the expected harvest date.</li> <li>- Rice can be harvested when 80% of panicles turns hard &amp; golden yellow. Over maturity should be avoided to reduce shattering losses.</li> </ul>
<b>Soybean and Groundnut</b>	Sowing to early vegetative		<ul style="list-style-type: none"> <li>- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm.</li> <li>- Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing.</li> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut</li> <li>- In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i>. (Apply after soil testing).</li> </ul>
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<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
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Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carp	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
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**Main Weather Observations**  
Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

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Rain/thundershowers would occur at many of the places over northeastern states

**Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012**  
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<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> <li>- Provide good drainage around the crop.</li> </ul>
<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>





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



**“Integrated Agromet Advisory Services”**

<b>Poultry</b>	All susceptible age groups		- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.
		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7 <sup>th</sup> day. - Give R <sub>2</sub> B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly).
			- litter material should be kept dry. - Keep the feed in dry place.
<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

I. Meghachandra Singh  
Scientist i/c, AMFU- Imphal Unit

“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal-East (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 22.0 – 29.0 °C. The minimum temp. is likely to be 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 93 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		<ul style="list-style-type: none"> <li>- Sow nursery area of 700 m<sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K<sub>2</sub>O before levelling.</li> <li>-Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.</li> </ul>
	Maturity to Harvesting stage (pre-kharif)		<ul style="list-style-type: none"> <li>- Drain the fields some 10-15 days before the expected harvest date.</li> <li>- Rice can be harvested when 80% of panicles turns hard &amp; golden yellow. Over maturity should be avoided to reduce shattering losses.</li> </ul>
<b>Soybean and Groundnut</b>	Sowing to early vegetative		<ul style="list-style-type: none"> <li>- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm.</li> <li>- Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing.</li> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut</li> <li>- In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i>. (Apply after soil testing).</li> </ul>
<b>Kharif maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed.</li> <li>- Earthing up and thinning to single plant may be done.</li> <li>- Top dress with 25kg N/ ha at knee high stage of crop.</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Storage</b>			<ul style="list-style-type: none"> <li>- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days.</li> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Bhindi</b>	Harvesting		<ul style="list-style-type: none"> <li>- Use neem based pesticides against Jassid.</li> <li>- Harvest fruits frequently. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.</li> </ul>
<b>Tomato</b>	Intercrop with maize		<p>To fetch premium price:</p> <ul style="list-style-type: none"> <li>- grow tomato in raised kharif maize field as an inter-crop in small scale.</li> <li>- it will be useful to produce early and bacterial wilt free quality tomato. Select varieties like Namdhari, Surakha and Arka Sameet.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin, bitter gourd)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> <li>- Provide good drainage around the crop.</li> </ul>
<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Poultry</b>	All susceptible age groups		- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.
		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7 <sup>th</sup> day. - Give R <sub>2</sub> B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly).
			- litter material should be kept dry. - Keep the feed in dry place.
<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

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Scientist i/c, AMFU- Imphal Unit

“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal-West (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 22.0 – 29.0 °C. The minimum temp. is likely to be 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 93 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		- Sow nursery area of 700 m <sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K <sub>2</sub> O before levelling. -Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.
	Maturity to Harvesting stage (pre-kharif)		- Drain the fields some 10-15 days before the expected harvest date. - Rice can be harvested when 80% of panicles turns hard & golden yellow. Over maturity should be avoided to reduce shattering losses.
<b>Soybean and Groundnut</b>	Sowing to early vegetative		- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm. - Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing. - Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut - In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i> . (Apply after soil testing).
<b>Kharif maize</b>	Vegetative		- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed. - Earthing up and thinning to single plant may be done. - Top dress with 25kg N/ ha at knee high stage of crop.



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



**“Integrated Agromet Advisory Services”**

<b>Storage</b>			<ul style="list-style-type: none"> <li>- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days.</li> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Bhindi</b>	Harvesting		<ul style="list-style-type: none"> <li>- Use neem based pesticides against Jassid.</li> <li>- Harvest fruits frequently. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.</li> </ul>
<b>Tomato</b>	Intercrop with maize		To fetch premium price: <ul style="list-style-type: none"> <li>- grow tomato in raised kharif maize field as an inter-crop in small scale.</li> <li>- it will be useful to produce early and bacterial wilt free quality tomato. Select varieties like Namdhari, Surakha and Arka Sameet.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin, bitter gourd)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
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<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
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<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
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**ICAR Research Complex for N.E.H. Region**  
**Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Integrated Agromet Advisory Services”**

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		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
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<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
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I. Meghachandra Singh  
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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

**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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u>  During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.	<u>Weather forecast for next five days of Senapati (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u>  During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 22.0 – 29.0 °C. The minimum temp. is likely to be 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 95 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.
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**Main Weather Observations**  
Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

**Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012**  
Rain/thundershowers would occur at many of the places over northeastern states

**Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012**  
Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		- Sow nursery area of 700 m <sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K <sub>2</sub> O before levelling. -Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.
<b>Soybean</b>	Sowing to early vegetative		- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm. - Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds
<b>Kharif maize</b>	Vegetative		- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed. - Earthing up and thinning to single plant may be done. - Top dress with 25kg N/ ha at knee high stage of crop.
<b>Storage</b>			- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days. - Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.



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



**“Integrated Agromet Advisory Services”**

<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>
<b>Poultry</b>	All susceptible age groups		<ul style="list-style-type: none"> <li>- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.</li> </ul>
		Coccidiosis	<ul style="list-style-type: none"> <li>- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.</li> </ul>
		Ranikhet	<ul style="list-style-type: none"> <li>- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7<sup>th</sup> day.</li> <li>- Give R<sub>2</sub>B vaccine at the age of 45-60 days @0.5 ml (intramuscularly).</li> </ul>
			<ul style="list-style-type: none"> <li>- litter material should be kept dry.</li> <li>- Keep the feed in dry place.</li> </ul>
<b>Goat</b>	All susceptible age groups	- De-worming	<ul style="list-style-type: none"> <li>- Deworm against Fascioliasis using Oxyclozide @ 15 mg/ kg body weight.</li> <li>- Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).</li> </ul>

“Integrated Agromet Advisory Services”

<i>Fisheries</i>			
Type of Fish	Stage	Management	Ago-metrological advisories
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 25.0 – 31.0 °C. The minimum temp. is likely to be 21.0 – 22.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 91 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		<ul style="list-style-type: none"> <li>- Sow nursery area of 700 m<sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K<sub>2</sub>O before levelling.</li> <li>-Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.</li> </ul>
	Maturity to Harvesting stage (pre-kharif)		<ul style="list-style-type: none"> <li>- Drain the fields some 10-15 days before the expected harvest date.</li> <li>- Rice can be harvested when 80% of panicles turns hard &amp; golden yellow. Over maturity should be avoided to reduce shattering losses.</li> </ul>
<b>Soybean and Groundnut</b>	Sowing to early vegetative		<ul style="list-style-type: none"> <li>- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm.</li> <li>- Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing.</li> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut</li> <li>- In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i>. (Apply after soil testing).</li> </ul>
<b>Kharif maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed.</li> <li>- Earthing up and thinning to single plant may be done.</li> <li>- Top dress with 25kg N/ ha at knee high stage of crop.</li> </ul>



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<b>Storage</b>			<ul style="list-style-type: none"> <li>- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days.</li> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Bhindi</b>	Harvesting		<ul style="list-style-type: none"> <li>- Use neem based pesticides against Jassid.</li> <li>- Harvest fruits frequently. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.</li> </ul>
<b>Tomato</b>	Intercrop with maize		To fetch premium price: <ul style="list-style-type: none"> <li>- grow tomato in raised kharif maize field as an inter-crop in small scale.</li> <li>- it will be useful to produce early and bacterial wilt free quality tomato. Select varieties like Namdhari, Surakha and Arka Sameet.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin, bitter gourd)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> <li>- Provide good drainage around the crop.</li> </ul>
<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>





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



**“Integrated Agromet Advisory Services”**

<b>Poultry</b>	All susceptible age groups		- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.
		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7 <sup>th</sup> day. - Give R <sub>2</sub> B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly).
			- litter material should be kept dry. - Keep the feed in dry place.
<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u></p> <p>During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u></p> <p>During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 23.0 – 30.0 °C. The minimum temp. is likely to be 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 89 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		- Sow nursery area of 700 m <sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K <sub>2</sub> O before levelling. -Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.
	Maturity to Harvesting stage (pre-kharif)		- Drain the fields some 10-15 days before the expected harvest date. - Rice can be harvested when 80% of panicles turns hard & golden yellow. Over maturity should be avoided to reduce shattering losses.
<b>Soybean and Groundnut</b>	Sowing to early vegetative		- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm. - Recommended variety of groundnut: ICGS-76. Seed rate- 80 kg kernels / ha. Spacing for sowing- 30cm X 10 cm and at a depth of 6-7 cm in furrows. Treat the seeds with <i>Rhizobium</i> @ 150g / 10 kg seeds just before sowing or inoculate PSB @ 200g/ 10 kg seeds before 2-3 hrs of sowing. - Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut - In acidic soil, liming should be done in furrow @ 4.5 qt/ha to optimize the soil <i>p<sup>H</sup></i> . (Apply after soil testing).
<b>Kharif maize</b>	Vegetative		- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed. - Earthing up and thinning to single plant may be done. - Top dress with 25kg N/ ha at knee high stage of crop.



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



**“Integrated Agromet Advisory Services”**

<b>Storage</b>			<ul style="list-style-type: none"> <li>- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days.</li> <li>- Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.</li> </ul>
<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Bhindi</b>	Harvesting		<ul style="list-style-type: none"> <li>- Use neem based pesticides against Jassid.</li> <li>- Harvest fruits frequently. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.</li> </ul>
<b>Tomato</b>	Intercrop with maize		<p>To fetch premium price:</p> <ul style="list-style-type: none"> <li>- grow tomato in raised kharif maize field as an inter-crop in small scale.</li> <li>- it will be useful to produce early and bacterial wilt free quality tomato. Select varieties like Namdhari, Surakha and Arka Sameet.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin, bitter gourd)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> <li>- Provide good drainage around the crop.</li> </ul>
<b>Brinjal</b>	Transplanting		<ul style="list-style-type: none"> <li>- Varieties resistant to fruit and shoot borer like Azad B-1 may be transplanted. Also, Pusa-hybrid-6 may be selected for Oct to Dec harvesting.</li> </ul>
<b>Cauliflower</b>	Nursery		<ul style="list-style-type: none"> <li>- Select varieties like White shot.</li> <li>- Raise nursery for early cauliflower in 18-20 cm raised beds.</li> <li>- Fumigate the soil.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>



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



**“Integrated Agromet Advisory Services”**

<b>Poultry</b>	All susceptible age groups		- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.
		Coccidiosis	- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.
		Ranikhet	- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7 <sup>th</sup> day. - Give R <sub>2</sub> B vaccine at the age of 45-60 days @0.5 ml (intra-muscularly).
			- litter material should be kept dry. - Keep the feed in dry place.
<b>Goat</b>	All susceptible age groups	- De-worming	- Deworm against Fascioliasis using Oxyclonazide @ 15 mg/ kg body weight. - Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).
<b>Fisheries</b>			
<b>Type of Fish</b>	<b>Stage</b>	<b>Management</b>	<b>Ago-metrological advisories</b>
Paddy cum fish culture		Field	<ul style="list-style-type: none"> <li>Preparation of trenches can be made for culture fish.</li> <li>Depth and sizes of the trenches can be varied depending on the species and sized of fish to be culture.</li> </ul>
Carps	Nurseries	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> <li>Oil emulsion process should be done before fish stocking</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>120-150g feed can fed for 1 lakh spawn/day.</li> <li>Feed should be provided 2-3 times/day.</li> <li>Feeding should be given in fine powder form.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>1.0 -10 million spawn/ha can be stocked in one hectare nurseries pond depending on water quality and availability of natural feed in the pond.</li> </ul>
	Grow out fish	Pond and water	<ul style="list-style-type: none"> <li>Pond should be free from unwanted vegetation and insects.</li> <li>Water depth should be maintained at 1.0-1.5m.</li> <li>During heavy shower, water should not drain directly into the pond. It should be passed through a bed of sand before draining.</li> </ul>
		Feed	<ul style="list-style-type: none"> <li>Well balanced feed fortified with vitamins and minerals should be provided as supplementary feed two-three times a day @ 3-5% body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>Regular checking for growth and diseases (if any) should be done by netting.</li> </ul>

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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN  
10<sup>th</sup> July, 2012

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 11<sup>th</sup> to 15<sup>th</sup> July, 2012 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal West Dist. (6<sup>th</sup> to 9<sup>th</sup> July, 2012)</u>  During the past four days the sky was partly cloudy to cloudy. 22.7 mm rainfall was recorded during past four days. Maximum temperature range observed was 33.4 – 36.4 °C, range of minimum temperature observed was 21.4 – 23.4 °C, mean relative humidity observed in morning and afternoon were 89.0 % and 64.75 % respectively. The average wind speed range was 2.5 – 6.0 km/hr.	<u>Weather forecast for next five days of Ukhrul (11<sup>th</sup> to 15<sup>th</sup> July, 2012)</u>  During next five days, there is likely to have light rainfall and thundery showers. The sky is likely to remain mainly cloudy to cloudy. The maximum temp. is likely to be 22.0 – 29.0 °C. The minimum temp. is likely to be 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 %. Minimum RH is likely to reach a max of 93 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.
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Main Weather Observations

Kalpana-1 cloud imagery at 0530 hrs IST shows convective clouds over parts of northeastern states

Major Feature of Weather Forecast up to 0830 hours IST of 13<sup>th</sup> July, 2012

Rain/thundershowers would occur at many of the places over northeastern states

Weather Outlook for subsequent 4 days up to 0830 hours IST of 17<sup>th</sup> July, 2012

Rain/thundershowers activities 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>Rice</b>	Sowing of Main Kharif rice		- Sow nursery area of 700 m <sup>2</sup> to transplant one hectare of rice field. Apply 1Kg of Carbofuran 3G along with 1.0 Kg N; 2 Kg K <sub>2</sub> O before levelling. -Maintain 2-3 cm of water level initially and drain out completely just before sowing. Increase water level to just submerge the soil surface and expose the green aerial sprouts.
<b>Soybean</b>	Sowing to early vegetative		- Recommended variety of soybean: JS 335. Seed rate- 50 kg/ha. Spacing for sowing- 50cm X 30cm. - Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds
<b>Kharif maize</b>	Vegetative		- Weeding should be done 30-35 days after sowing or Simazine 50WP may be applied @ 0.75 kg/ha at 30 days after sowing for effective control of annual grass and broad leaf weed. - Earthing up and thinning to single plant may be done. - Top dress with 25kg N/ ha at knee high stage of crop.
<b>Storage</b>			- To prevent the infestation of stored grains proper care must be taken to prevent attack of rodents and mould growth. Provide proper ventilation or sun dry the bags/ grains on sunny days. - Seeds must be stored in RC-seed bins after proper drying. Check for germination of seeds. Clean and dry the seeds.



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



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<b>Horticulture Crops</b>			
<b>Cow pea</b>	Harvesting		<ul style="list-style-type: none"> <li>- Keep the bed clean.</li> <li>- Harvest the tender &amp; half grown pods. Go for frequent harvesting.</li> </ul>
<b>Citrus</b>			<ul style="list-style-type: none"> <li>- Prune the disease infected twigs and burn them outside the farm area.</li> <li>- Spray Copper oxychloride @ 3ml/lit to control fungal disease.</li> </ul>
<b>Cucurbits (sponge gourd, pumpkin)</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Monitor for plants being affected with powdery mildew. If observed, then spray Bayleton @ 7 g/ 10 lit of water.</li> </ul>
<b>Chilli</b>	Fruiting to harvesting		<ul style="list-style-type: none"> <li>- Retain healthy and mature fruits for seeds for planting in next season. Treat the seeds with Dithane M-45 @ 3 gm/ kg seed.</li> </ul>
<b>Turmeric + French Bean</b>	Rhizome formation in turmeric		<ul style="list-style-type: none"> <li>- Sow short duration crop like Pant Anupam as intercrop with turmeric.</li> <li>- Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.</li> <li>- Use bio-degradable mulches in between turmeric.</li> </ul>
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease infestation</b>	<b>Agro-meteorological advisories</b>
<b>Cattle / Buffalo</b>	All susceptible age groups	Fascioliosis	<ul style="list-style-type: none"> <li>- Vaccinate with Raksha BQ @ 2 ml sub-cutaneously.</li> <li>- Deworm using Oxyclozide @ 10-15 mg/ kg body weight.</li> </ul>
<b>Pig</b>	Above 3 months of age		<ul style="list-style-type: none"> <li>- De-worm using Piperazine liquid @ 3-6 ml/10 kg body weight orally once only.</li> </ul>
	All susceptible age groups	- Swine Fever	<ul style="list-style-type: none"> <li>- Vaccinate against Swine Fever after 3 months of age..</li> </ul>
<b>Poultry</b>	All susceptible age groups		<ul style="list-style-type: none"> <li>- Deworm with Albendazole @ 35 ml for 100 birds in drinking water once and repeat it after 7 days.</li> </ul>
		Coccidiosis	<ul style="list-style-type: none"> <li>- Administer Coximar @ 2g/5 lit of water as preventive measure against Coccidiosis.</li> </ul>
		Ranikhet	<ul style="list-style-type: none"> <li>- Vaccinate with strain live vaccine @ one drop on eyes or nostril. at 7<sup>th</sup> day.</li> <li>- Give R<sub>2</sub>B vaccine at the age of 45-60 days @0.5 ml (intramuscularly).</li> </ul>
			<ul style="list-style-type: none"> <li>- litter material should be kept dry.</li> <li>- Keep the feed in dry place.</li> </ul>
<b>Goat</b>	All susceptible age groups	- De-worming	<ul style="list-style-type: none"> <li>- Deworm against Fascioliasis using Oxyclozide @ 15 mg/ kg body weight.</li> <li>- Give Tetramizole hydrochloride @ 15mg/kg body weight (single dose).</li> </ul>



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Fisheries			
Type of Fish	Stage	Management	Ago-metrological advisories
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