



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Senapati (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 25.0 – 26.0 °C & minimum temp. 11.0 – 14.0 °C. Relative humidity may reach upto 100 % (max RH) & 40 % (min RH). The average wind speed may be 4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Tamenglong (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 28.0 – 30.0 °C & minimum temp. 18.0 – 20.0 °C. Relative humidity may reach upto 98 % (max RH) & 43 % (min RH). The average wind speed may be 3-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Thoubal (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 28.0 – 29.0 °C & minimum temp. 16.0 – 17.0 °C. Relative humidity may reach upto 99 % (max RH) & 55 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |





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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamizole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Ukhrul (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 25.0 – 26.0 °C & minimum temp. 11.0 – 13.0 °C. Relative humidity may reach upto 98 % (max RH) & 53 % (min RH). The average wind speed may be 3-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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





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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Bishnupur (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 27.0 – 28.0 °C & minimum temp. 16.0 – 18.0 °C. Relative humidity may reach upto 98 % (max RH) & 51 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Chandel (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 17.0 – 19.0 °C. Relative humidity may reach upto 97 % (max RH) & 60 % (min RH). The average wind speed may be 2-3 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Churachandpur (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 17.0 – 18.0 °C. Relative humidity may reach upto 99 % (max RH) & 51 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |





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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamizole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting  |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Imphal - East (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 27.0 – 28.0 °C & minimum temp. 14.0 – 16.0 °C. Relative humidity may reach upto 100 % (max RH) & 42 % (min RH). The average wind speed may be 3-4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**23<sup>rd</sup> October, 2015**

**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 24<sup>th</sup> to 28<sup>th</sup> October, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (21<sup>st</sup> to 22<sup>nd</sup> October, 2015)**

During last three days sky was to mainly clear to partly cloudy. No rainfall was recorded during last three days. Maximum temperature range observed was 29.1– 29.3 °C, range of minimum temperature observed was 17.0 – 17.3 °C, mean relative humidity observed in morning and afternoon were 85.33 % and 63.33 % respectively. The average wind speed range was 2.3 – 2.9 km/hr.

**Weather forecast for next five days of Imphal - West (24<sup>th</sup> to 28<sup>th</sup> October, 2015)**

There may be no rain upto Wednesday. Sky will remain mainly clear to partly cloudy with maximum temp. of 27.0 – 29.0 °C & minimum temp. 14.0 – 16.0 °C. Relative humidity may reach upto 99 % (max RH) & 41 % (min RH). The average wind speed may be 4 km/ hr during next five days. The Wind direction may north easterly during next five days.

| Name of the crop   | Stage   | Pest and disease      | Agro-meteorological advisories   |
|--|---|-----------------------|--|
| <b>Field Crops</b>                                       |   |                       |  |
| <b>Kharif Rice</b>                                       | Grain filling and maturity                        |                       | - For crops at maturity stage, drain out water from the crop field 10-15 before the expected date of harvesting.<br>- Harvesting may be done, if 75-80 % of the spikelet is yellow in colour.  |
|  |   | Blast                 | Spray Tricyclazole 75WP @ 9 g/ 15 lit water or Propiconazole 25EC @ 15 ml/ 15 lit water or Carbendazim 50 WP @ 15g/ 15 lit water.  |
|  |   | Bacterial leaf blight | Spray Copper fungicide (Blitox 0.3%) alternately with Streptocycline (250ppm).   |
| <b>Soybean/ Groundnut</b>                                | Harvesting to post harvesting                     |                       | For seed purpose, bundling should be done and kept for 3-4 days to increase maturity. Thresh after 7-10 days of drying. Grain should be fully sundried to (10-12) % moisture for soybean and for groundnut pods should not have more than 5-8 % moisture. Frequent drying is suggested.  |
| <b>Lentil</b>  | Sowing  |                       | Lentil may be sown at zero tillage just after harvesting rice.   |
| <b>Rapeseed/ mustard</b>                                 | Sowing  |                       | Rapeseed/ mustard may be sown at zero tillage just after harvesting rice.  |
| <b>Potato</b>  | Land preparation                                  |                       | - Land preparation for planting potato may be started.<br>- Collect seed tubers from reliable source and treated it with Sixer (Carbendazim + Mencozeb) @ 2 gm/lit of water or Carbaryl 50 WP or Ridomil @ 2 gm/kg seed/ tubers for 20 minutes and let it dry in shed before planting as preventive measure against soil borne diseases.                   |
| <b>Storage (seed)</b>                                    |   |                       | - Clean and store the seeds in RC-seed bins after proper drying of the desiccant charcoal. Check for moisture content or weight of seeds. For grains, store in well ventilated godowns with regular check for moisture.  |
| <b>Horticulture Crops</b>                                |   |                       |  |
| <b>Vegetables (Cole Crops/ Tomato/ Garden pea, etc.)</b> | Land preparation for direct sowing/ transplanting |                       | - Incorporate Tricoderma harzianum @ 5-6 kg/ sangam at the time of final land preparation (about 4-5 days ahead of sowing/ transplanting).<br>- Transplant 25-30 days old seedlings (4 leaves stage) of cole crops and tomato.<br>- Treat garden pea seeds (variety like Arkel, Azad) with Bavistin @ 2.5 mg/ lit of water before sowing.                  |
| <b>Tree Bean</b>   | Pre-bearing and bearing trees                     |                       | - Apply 60g DAP+ 10g MOP + 20g Tracel (micronutrient mixture) to pre-bearing and bearing trees before flowering for better yield.<br>- Spray Carbendazim @ 2g/ lit water to moist the soil to a depth of 1 ft. to prevent Verticillium wilt.<br>- 20g Carbofuran 3G/ plant may also be in-corporated as prophylactic measure against bark borer/ termites. |
| <b>Citrus</b>  | Bearing trees                                     | Trunk borer           | - Kill the trunk borer grubs.<br>- Clean the bore holes of the infested trunk with iron wire. Insert a cotton swab soaked in Dichlorovos or inject 5 ml of Dichlorovos solution (2ml/lit of water) and paste the bore hole with mud.   |



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



**“Gramin Krishi Mausam Seva”**

|                                 |  |                                  |   |
|---------------------------------|--|----------------------------------|---|
|                                 |  |                                  | - Apply lime (2-2.5 kg/tree) in a circular trench around the trunk in alternate year.   |
| Papaya                          | Rhizome development                          | Soft rot                         | - Papaya seedling (15-20 cm in height) can be planted at a distance of 1.8 m X 1.8 m distance in the area where occurrence of frost is not common.<br>- For fruiting plants, spray Bavistin (0.1%) at 20 days intervals or Mancozeb or Blitox (0.2%) at 10 days interval to prevent diseases.<br>- To escape fruit fly attack, harvest the fruits at 1/4th ripening stage. To manage fruit flies, use pheromone traps or spray Dimethoate (0.1%) in case of severe infestation. |
| Animal Sciences                 |  |                                  |   |
| Name of the animal              | Growth stage                                 | Disease/ infestation             | Agro-meteorological advisories  |
| Poultry (Chicken/ Turkey/ Duck) | All age groups                               | Care & management                | - Deworm with Albendazole liquid @ 30 to 40 ml for 100 birds once only and repeat with half dose after 7 days. Also, deworm at every 3 weeks interval.<br>- Proper light is to be provided for layers. No light for grower groups.<br>- Start keeping new batch chicks in case of layer variety.  |
|                                 |  | Coccidiosis                      | - Administer Amprolium Powder @ 1g/lit of drinking water for 5 days.  |
|                                 |  | Vaccination for Fowl pox         | -Vaccine has to be given for Fowl pox.  |
| Sheep/ Goat                     | Above 3 months of age                        | Deworming                        | - Give Ranizole suspension @ 3ml/ 10 kg body weight   |
| Pig                             | All age groups                               | Management                       | - Keep sheds dry.   |
|                                 |  | Deworming                        | Give Morantel citrate tab. (Banminth) @ 15mg/kg body weight.  |
|                                 |  | Ectoparasites (skin infestation) | Add Butox @ 2ml/lit of water and brush with the solution twice every fortnightly.   |
| Cattle / Buffalo/ Mithun        | Above 3 months of age (as and when required) | Deworming                        | Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight ( Ranizole) in lower altitude.   |
|                                 |  | Ectoparasitic infestation        | Butox liquid @ 2 ml. in 1 litre of water and brush using the solution twice a week  |
|                                 |  | Black Quarter/ Black leg disease | Vaccinate with B.Q & H.S. vaccine for all the animals of above 3 months   |
| Fishery:                        |  |                                  |   |
| Type of Farming                 | Stage  | Management                       | Agro-metrological advisories  |
| Carp culture                    | Nurseries/ grow-out                          | Pond and water                   | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5.<br>Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water.   |
|                                 |  | Feed                             | Provide feed 2 times @ 5 % body weight per day.<br>Provide good feed having 30% crude protein fortified with vitamins and mineral.  |
|                                 |  | Fish                             | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond.<br>- Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder.<br>- Sampling of fish for growth, disease should be done regularly by netting.   |

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