



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

| | |
|---|--|
| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Bishnupur (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 29.0 - 30.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 88 %. The average wind speed during next five days may be 2 km/hr.</p> |
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| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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MANIPUR BULLETIN

10th September, 2013

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| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Chandel (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 27.0 - 29.0 °C and minimum temp. of 19.0 – 20.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 84 %. The average wind speed during next five days may be 2-3 km/hr.</p> |
|---|--|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

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Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)

During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. **53.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.

Weather forecast for next five days of Churachandpur (11th to 15th September, 2013)

It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 28.0 - 31.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 87 %. The average wind speed during next five days may be 2 km/hr.

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|--|---|---|--|
| Field Crops | | | |
| - All sprays mentioned below may be done when sky is clear for at least 2-3 hours. * Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. - Farmers are advised to add stickers @ 5ml/ pump. | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | - Avoid water logging. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water. |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | - Avoid water logging. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water. |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
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MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

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|---|--|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
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| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

Significant past weather for the preceding bi-weekly of
Imphal - West (6th to 9th September, 2013)

During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. **53.3 mm** rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.

Weather forecast for next five days of Imphal - West (11th to 15th September, 2013)

It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 30.0 - 31.0 °C and minimum temp. of 21.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 86 %. The average wind speed during next five days may be 0-2 km/hr.

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|--|---|---|--|
| Field Crops | | | |
| - All sprays mentioned below may be done when sky is clear for at least 2-3 hours. * Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. - Farmers are advised to add stickers @ 5ml/ pump. | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | - Avoid water logging. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water. |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | - Avoid water logging. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water. |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



**ICAR Research Complex for N.E.H. Region
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“Integrated Agromet Advisory Services”

| | | | |
|---|-------------------------------|---|--|
| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

| | |
|---|---|
| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Senapati (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 26.0 - 29.0 °C and minimum temp. of 15.0 – 18.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 82 %. The average wind speed during next five days may be 0-3 km/hr.</p> |
|---|---|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



**ICAR Research Complex for N.E.H. Region
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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

| | |
|---|---|
| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Tamenglong (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 30.0 - 32.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 82 %. The average wind speed during next five days may be 2 km/hr.</p> |
|---|---|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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



“Integrated Agromet Advisory Services”

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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

| | |
|---|--|
| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Thoubal (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 28.0 - 30.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain max of 100 % and minimum RH of 90 %. The average wind speed during next five days may be 0-4 km/hr.</p> |
|---|--|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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



“Integrated Agromet Advisory Services”

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| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
| Name of the animal | Growth stage | Disease/ infestation | Agro-meteorological advisories |
| Sheep/ Goat | Above 3 months of age | Deworming | - Administer Tolzan-F 2.5ml orally/ 50kg b. wt. |
| Pig | Above 3 months of age | Helminth parasite - A.suum - Oesophagostomum sp. | - Administer Piperazine liq. @ 15 ml orally/ adult once. |
| | | Ectoparasites | - Spray Butox @ 2ml in 1 lit of water, twice a week. |
| Cattle / Buffalo/ Mithun | Above 3 months of age | Helminth parasite | - Administer Nilzan-90ml suspension @90ml for 300 kg b. wt. |
| | | Ecto parasite | - Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval. |
| Poultry | All susceptible age groups | Ectoparasites | - Spray Butox over the flock @ 3ml in 1 lit of water once a week. |
| | | Endoparasite | - Deworm with Piperazine Hexahydrate @ 50ml/100 birds accompanied with Brotone liquid @ 5-10 ml/ 100 birds. |
| | | Coccidiosis | - Administer Coximar (@ 1g/lit of drinking water) for 7 days. |
| Fisheries | | | |
| Type of Farming | Stage | Management | Agro-metrological advisories |
| Carp culture | Grow-out | Pond water | If the colour or odour of pond water changes, then replace with the fresh water. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked. |
| | Nurseries | | Apply agri-lime @250kg/ha at valley and 300kg at hilly areas. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days |
| Paddy cum fish culture | Water | | Water depth of the trenches in paddy field should be maintained at 1.0m. Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops. |
| Cat fish (Ngakra) | Pond and water | | Water depth should be maintained at 0.5m -0.8m for nurseries |
| | Feed | | Feed with high protein content 35-40% CP should be given @ 5-8% body weight. |

I. Meghachandra Singh
Sp Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th September, 2013

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 11th to 15th September, 2013 as given below:

| | |
|---|--|
| <p><u>Significant past weather for the preceding bi-weekly of Imphal - West (6th to 9th September, 2013)</u></p> <p>During the past four days the sky was mainly cloudy to cloudy but mainly clear during afternoon hours of 7th September. 53.3 mm rainfall was recorded during past four days. Maximum temperature range observed was 30.0 – 32.4 °C, range of minimum temperature observed was 20.5 – 22.0 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 66.75 % respectively. The average wind speed range was 1.2 – 2.2 km/hr.</p> | <p><u>Weather forecast for next five days of Ukhrul (11th to 15th September, 2013)</u></p> <p>It is likely to have moderate to heavy rains upto 15th September. The sky is likely to be mainly cloudy with maximum temp. of 25.0 - 28.0 °C and minimum temp. of 14.0 – 16.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 77 %. The average wind speed during next five days may be 2-3 km/hr.</p> |
|---|--|

| Name of the crop | Stage | Pest and disease infestation | Agro-meteorological advisories |
|---|---|---|---|
| Field Crops | | | |
| <p>- All sprays mentioned below may be done when sky is clear for at least 2-3 hours.</p> <p>* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying.</p> <p>- Farmers are advised to add stickers @ 5ml/ pump.</p> | | | |
| Rice | Panicle Initiation to flowering (for normal sown) | | - Make proper drainage system for outflow of excess water in rice crop field. |
| | Tillering (for late sown) | | |
| | | Sheath rot | Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water. |
| | | Sheath blight/ Bakani | Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water. |
| | | Smut disease of rice | Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage. |
| | | borer | Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water. |
| | | Case worm, leaf folder, whorl maggot | Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam). |
| | | Gall midge | Thiomethoxam @ 5g/ 15 lit water. |
| | | Bacterial leaf blight | Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam). |
| | | Plant hopper or any sucking insect | Imidachloprid @ 7ml/ 15 litres of water. |
| Soybean | Flowering to pod formation | Hairy caterpillars Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Groundnut | Pegging | Hairy caterpillars Tikka disease Rust | <p>- Avoid water logging.</p> <p>- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days.</p> <p>- Redomil75% MZ @ 15g/ 15litre water.</p> <p>- Bayleton @ 10g/ 15 ml of water.</p> |
| Blackgram / rice bean | Vegetative | Hairy caterpillars | - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. |
| Storage | | | - Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. |



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| | | | |
|---|-------------------------------|---|--|
| Horticulture Crops | | | |
| * To prevent damping off diseases, soil treatment of nursery bed for vegetables must be done with Carbendazim@ 3g/15 lit water must be done. Also seed treatment may be done using Dithane M-45/ Thiram/ Captan @ 2g/kg seed. | | | |
| * For nurseries, dip root in Carbendazim @ 10g/ 5 lit water for 30 min before transplanting. | | | |
| Garden pea/ french bean | Land preparation | | - After harvesting of colocasia/ cucurbits, raised beds may now be prepared as for sowing of pea/ French bean. - Wherever possible drain out excess water. |
| Tomato (off season) | fruiting | Fruit & shoot borer | Deltamethrin 12% @ 7ml/15 lit water. |
| Fruit plants (Mango, Litchi, guava) | Planting | | Select foothills/ hill slope areas for establishment of new orchards. Prepare pits of size 2x2x2 feet. After planting put the soil again making small mound to avoid water stagnation in the centre/ collar region. |
| Animal Sciences | | | |
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