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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **2** | **3** | **5** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **0** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **5** | **5** | **5** | **10** | **1** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **4** | **10** | **2** | **10** | **1** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **2** | **10** | **1** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **3** | **5** | **3** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **3** | **5** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **5** | **3** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **2** | **2** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **2** | **0** | **15** | **3** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **5** | **5** | **5** | **10** | **1** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
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 |
| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 7****Date:Tuesday,22nd January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.7°C and 7.7°C, respectively. Average relative humidity was 90 percent at 0700 hrs. and 64 percent at 1400 hrs. Soil temperature at 5 cm depth was 10.9°C at 0700 hrs. and 20.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 5.7 hours and 1.4mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(Vaishali)**

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| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **2** | **4** | **5** | **10** | **0** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

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| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall forecast during the forecasted period, farmers are advised to skip irrigation in standing crops such as wheat, maize, gram, pea, potato etc. Farmers are also advised to take precaution in different ongoing agricultural operations like spraying of pesticides in the crop field. |
| Elephant yam bean and Turmeric | Harvesting | In view of rainfall forecast, farmers are advised to take utmost care in the harvesting of matured crop of elephant yambean and turmeric. Keep the harvested produce in the safe place to prevent it from spoilage/losses. |
| Vegetables | Fruiting | * Intercultural operation is advised in vegetables. Regular monitoring is advised in vegetables crop against attack of insect-pests and diseases.
* Land preparation is advised for sowing of summer vegetables. For healthy and good yield, application of 15-20 ton FYM is advised during land preparation.
 |
| Mango /Litchi  | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees in clear days. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* Spraying of Sulpher 80WP @2.0gm/liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of Powdery mildew.
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| Maize | Knee high/Late vegetative phase | In view of rainfall forecast, farmers are advised to apply 50 kg nitrogen per hectare in 50-60 days old maize crop after receipt of rainfall. Monitoring is advised for attack of stem borer in maize crop. |
| Potato | Vegetative/tuber formation | Regular monitoring is advised for infestation of cut worm in potato crop. This is a highly destructive insect pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised. |
| Onion | Early vegetative stage |  Weeding is advised in 20-25 days old transplanted onion crop. |
| Animal husbandry | Milch animal | During the months from November to February, *Degnala* disease is observed among the milch animals. The infected animals show the symptoms of almost rotten like teats and tails due to selenium toxicity found in fungal affected straws that the animals are feds. As a control measure, 1.0 gram sodium hydroxide in 400 ml water should be fed to the animals mixing with 20 kilograms of paddy straw. It is advised to mix 200 gms of linseed and 200 gms of jaggery in the above mixture of feed. For treatment, Pentasulph oral @60 gms is advised to the infected animals on the 1st day followed by 30 grams for next 15 days. |

**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(23-27th January, 2019)**

 **(West Champaran)**

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| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **23****January** | **24****January** | **25****January** | **26****January** | **27****January** | **Remarks** |
| **Rainfall(mm)** | **5** | **5** | **3** | **10** | **1** | **Thundershower/light rainfall** |
| **Max. T (°C)** | **21** | **21** | **22** | **22** | **23** | **-** |
| **Mini. T (°C)** | **7** | **7** | **8** | **8** | **9** |
| **Cloud cover (okta)** | **2** | **4** | **6** | **8** | **7** | **Mainly cloudy sky. Development of thunder clouds** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **90** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **50** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

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**(A. Sattar)**

**(Nodal Officer)**