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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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
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 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(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. 31****Date: Thursday, 18April,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 34.7°C and 21.2°C, respectively. Average relative humidity was 77 percent at 0700 hrs and 56 percent at 1400 hrs. Soil temperature at 5 cm depth was 26.5°C at 0700 hrs and 34.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.9km/hr, 8.6hours and 6.3mm, respectively. At the center, about 1.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of dry weather forecast, harvesting and threshing of wheat crop is advised as priority base. Farmers are also advised to irrigate standing crops such as summer maize, sunflower, vegetables, Mango and litchi orchards as per status of soil moisture.  |
| Spring maize | Knee height | Monitoring is advised for infestation of maize stem borer. The young caterpillars feed on the epidermal layer of leaf sheath and remain there in the early stages of growth. Later they bore in to central shoots resulting in the drying up of the growing point and formation of dead heart in young maize plants. For management, spraying of Chlorpyriphos 20 EC @20.5 ml/liter of water is advised. Farmers are also advised to maintain proper soil moisture for healthy growth of crop.  |
| Green gram/Black gram | Early vegetative | * Weeding is advised in green gram and black gram crop.
* Monitoring is advised against attack of hairy caterpillars in the crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised.
 |
| Mango | Pea sized fruit | * Monitoring is advised for attack of mango mealy bug insect-pest. If population of bugs seen at the plant, spraying of Dimethoate 30EC @ 1.0ml/ liter of water is advised.
* Spraying of Imidacloprid 17.8 SL@1ml/2 liters of water and Hexaconazole@1gram/2 liters of water or Dainocap 46 EC@1 ml/liter of water is advised. This will help against mango hopper infestation and powdery mildew disease. Application of plant growth regulator like Planofix (Napthyl Acetic Acid-NAA) @1ml/3 liters of water is advised against fruit drop.
 |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd. Irrigation is advised as per soil moisture status.
* Monitoring is advised for infestation of red pumpkin beetle in cucurbitaceous crop. If infestation is found, spraying of Dichlorvos 76EC @1 ml /litre of water is advised.
* Monitoring is also advised for infestation of fruit and shoot borer in Lady’s finger. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
 |
| Onion | Vegetative | Regular monitoring is advised for infestation of thrips in onion crop. If insect population is found above ETL, spraying of Profenofos@1ml/L or Imidacloprid@1ml/4 liter of water is advised.  |
| Fruit and forestry plants | For planting | Those farmers who are interested in planting of fruit and other forest saplings are advised to dig pits with a size of 1.0 meter diameter having 1.0 meter depth and leave them as such. |

**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(19-23 April, 2019)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19****April** | **20****April** | **21****April** | **22****April** | **23****April** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **33** | **35** | **35** | **36** | **36** | **-** |
| **Mini. T (°C)** | **21** | **22** | **22** | **23** | **24** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Light cloudy sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Westerly/ Easterly** |

**Advisory for the farmers**

|  |  |  |
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**(A. Sattar)**

**(Nodal Officer)**