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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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **6** | **2** | **1** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **2** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **7** | **5** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **15** | **15** | **20** | **25** | **25** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **5** | **5** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **10** | **2** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **2** | **6** | **2** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **10** | **10** | **10** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
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| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
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| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **5** | **0** | **2** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **2** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **15** | **15** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
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* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
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* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **5** | **10** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
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| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
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 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,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 38.1°C and 24.4°C, respectively. Average relative humidity was 70 percent at 0700 hrs and 48 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.4°C at 0700 hrs and 38.9°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 9.7hours and 6.8mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **4** | **1** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **1** | **5** | **3** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
| Wheat/*rabi* maize/ pigeon pea | Harvesting | In view of rainfall during 3-4 May, farmers are advised to take utmost care in the harvesting and threshing of wheat, early sown *rabi* maize and pigeon pea crop. Complete the threshing of harvested wheat crop at the earliest.  |
| Lady’s fingerand Cucurbitaceous crop | Flowering/Fruiting | * Monitoring is advised for infestation of leaf hopper in lady’s finger. The damage is caused due to sucking of sap by hoppers, which lead to curling and crinkling of leaves. In case of heavy infestation the leaves turn brick red and crumble. If hopper crosses ETL (5 hoppers/plant), spraying of Imidacloprid @ 0.5ml/liter of water is advised under clear days.
* Monitoring is advised for infestation of mites in lady’s finger. Larvae and nymph of mite are greenish red while adults are oval reddish brown in colour. Mite feed on the under surface of leaves and the affected leaves gradually start curling and get wrinkled and crumpled. If infestation is found, spraying of Ethion @1.5-2 ml/liter of water is advised.
* Monitoring is 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.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised.
* Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
 |
| Green gram/Black gram | Vegetative/Flowering | * Monitoring is advised against attack of hairy caterpillars in the late sown 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 in clear days.
* Monitoring is advised in green gram and black gram crops against sucking insect pests such as aphid, green hopper, white fly and thrips. If infestation occurs, spraying of Dimethoate 30EC @ 1.0 liter/hectare is advised.
 |
| Spring maize | Vegetative | 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. |
| Onion | Bulb formation | Monitoring is advised for infestation of thrips in onion crop. The leaves of affected plants become curled, wrinkled and gradually dry up. If insect population exceeds ETL, spraying of Profenofos@1ml/Lof water is advised.  |
| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(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. 34****Date: Tuesday, 30April,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 May, 2019)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1** **May** | **2****May** | **3** **May** | **4** **May** | **5****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **2** | **3** | **0** | **0** | **Chances of light rainfall during 3-4 May** |
| **Max. T (°C)** | **39** | **39** | **38** | **36** | **36** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **22** |
| **Cloud cover (okta)** | **0** | **2** | **4** | **2** | **2** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **70** | **70** | **70** | **60** | **60** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **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 during 3-4 May, farmers are advised to postpone irrigation in standing crop. Also postpone spraying of pesticides in the crop during this period. |
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| Livestock | **-** |  Provide clean water to the milch animals and keep them in the shaded place in day hours. |

**(A. Sattar)**

**(Nodal Officer)**