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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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **1** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **45** | **45** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **1** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **55** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **1** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **1** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **1** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
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* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **55** | **55** | **55** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **45** | **50** | **50** | **50** | **45** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **55** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
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* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
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* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(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. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 22.5°C and 5.4°C, respectively. Average relative humidity was 83 percent at 0700 hrs.and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 9.4°C at 0700 hrs. and 19.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.1km/hr, 4.5hours and 1.5mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Standing *rabi* crops | \_ | In view of cloudy sky and light rainfall at several places in north Bihar districts around 7 January, farmers are advised to postpone irrigation in the standing crops. Application of pesticides is advocated only under clear sky and dry weather conditions. |
| Maize | Vegetative | Farmers are advised to give irrigation in 50-55 days old maize crop. Application of 50 kg nitrogen per hectare is also advised after irrigation. |
| Wheat | Tillering | * Spraying of mixture of Sulfosulfuron@33 gm and Metsulfuron @20 gm in 500 liters of water per hectare is advised in wheat crop, which is in 30-35 days stage in order to protect the crop from infestation of weeds. ***Precaution:-****Never use these herbicides if mustard, sunflower, pea or any other broad leaved crops are intercropped with wheat.*
* Farmers are advised to give irrigation in late sown wheat crop, which is in 21-25 days (Crown Root Initiation) stage. Application of 30 kg nitrogen per hectare is also advised after irrigation.
* Farmers are advised to give 2nd irrigation in the crop, which is in 45-50 days stage.
 |
| Potato | Vegetative | Farmers are advised to wait a couple of days in view of rainfall forecast while giving irrigation in potato crop. Anticipated weather may be congenial for outbreak of blight disease in the crop. Hence, regular monitoring is advised. Spraying of Diethane M-45@2.5 gram/liter of water is advised, if disease infestation is observed. Spraying of Redomil @1.5gram/liter of water is advised 8-10 days after first spray. |
| Pea | Fruiting | * Spraying of 2 % urea is advised for proper growth of pods in pea crop.
* Regular monitoring is advised against infestation of powdery mildew disease in early sown pea crop. Farmers are advised to spray Karathane @ 1 ml per litre of water or Sulfex @ 3gm per litre of water, if disease infestation is observed.
 |
| Pigeon Pea | Flowering | Monitoring is advised for infestation of pod borer insects in pigeon pea crop, which is in flowering stage. If pest infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Gram | Flowering | Regular monitoring is advised for infestation of pod borer in gram crop. If infestation occurs, installation of Pheromone trap @ 3-4 traps per acre is advised when 15-20 % flowering is observed. “T” shaped bird perches in and around crop field are to be installed for controlling insect population. Spraying of Spinosad 48EC@1ml/4 liters of water is suggested if pest population reaches ETL. |
| Rabi onion | Transplanting | Transplanting should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. |
| Animal care | - | Special care should be given to milch animal. Farmers are advised to give 50 gram salt and 50-100 gm mineral mixture supplicated with feeds prepared from grains, and green & dry hay to keep them healthy and strong under low temperature condition. Do not keep animal in open at night.  |

**(A. Sattar)**

**(Nodal Officer)**

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| **Bulletin No. 2****Date:Friday,4th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

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**Medium Range Weather Forecast**

**(5-9th January, 2019)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **5****January** | **6****January** | **7****January** | **8****January** | **9****January** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **1** | **0** | **Possibility of drizzle around 7 January** |
| **Max. T (°C)** | **22** | **22** | **21** | **20** | **21** | **-** |
| **Mini. T (°C)** | **6** | **7** | **6** | **7** | **8** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **0** | **0** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **95** | **95** | **95** |  |
| **Min Relative Humidity (%)** | **50** | **50** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly**  | **Easterly** | **Easterly** | **Westerly** | **Westerly** | **Easterly /Westerly** |

**Advisory for the farmers**

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

**(Nodal Officer)**