|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **1** | **5** | **9** | **2** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **3** | **5** | **5** | **5** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **2** | **0** | **8** | **8** | **12** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **1** | **1** | **1** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **2** | **3** | **8** | **40** | **10** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **4** | **5** | **50** | **0** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **4** | **4** | **50** | **1** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **6** | **1** | **1** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **1** | **2** | **0** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **2** | **1** | **6** | **4** | **4** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **2** | **7** | **3** | **1** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **1** | **4** | **40** | **0** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 48**  **Date: Tuesday, 18 June,2019** | **Description: 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 41.3°C and 28.3°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 40 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.9°C at 0700 hrs and 40.3°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.5km/hr, 8.9 hours and 7.2mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

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

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **19**  **June** | **20**  **June** | **21**  **June** | **22**  **June** | **23**  **June** | **Remarks** |
| **Rainfall(mm)** | **2** | **0** | **9** | **19** | **16** | **Dry weather in next 2-3 days and chances of light rainfall around 22-23 June at isolated places** |
| **Max. T (°C)** | **41** | **40** | **40** | **38** | **35** | **-** |
| **Mini. T (°C)** | **28** | **28** | **27** | **27** | **24** |
| **Cloud cover (okta)** | **2** | **4** | **7** | **5** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **45** | **45** | **45** |  |
| **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)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * To see the possibility of light rainfall around 22-23 June at isolated places, farmers are advised to take precaution in agricultural operations. * In view of dry weather in coming 2-3 days, complete the harvesting and threshing of *rabi* maize and mung bean/urd bean. |
| *Kharif* Paddy | Nursery  sowing | Nursery sowing is advised for medium duration of rice varieties such as *Seeta, Santosh, Saroj, Rajshri, Prabhat, Rajendra suvasni, Rajendra kasturi* and *Rajendra bhagwati* in North Bihar. Before sowing, seeds should be treated with Carbendazim@1.5 gram/kg of seed. Weeding is advised in 10-12 days old paddy nursery. |
| *Kharif* onion | Nursery  sowing | Nursery sowing is advised for *kharif* onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. *Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan* are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources. For healthy growth of seedlings, treated seeds should be used. Nursery should be covered by net at the height of 6-7 feet for protection against sunlight. |
| Turmeric | Sowing | Sowing of *Rajendra Sonia* and *Rajendra Sonali* varieties of turmeric is advised. The size of the seed should be around 30-35 gram which contains 4-5 buds. Seed treatment with 2.5 gram Diethane M-45 plus 0.1% bavistin/Kg of seed is advised. Sowing should be done after half an hour of seed treatment. |
| *Kharif* Maize | Sowing | Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are recommended for North Bihar. Application of 100 quintal of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised before sowing. Seed rate@20 kg per hectare is advised. Check the proper soil moisture before sowing. |
| Pigeon Pea *(Arher)/*  Sesamum *(Til)/*  Sunflower | Land  preparation | Land preparation is advised for sowing of pigeon pea *(Arhar),* sesamum*(Til)* and sunflower. Application of well decomposed FYM/Compost is suggested during land preparation. It increases the water use efficiency and nutrient quantity in the soil. |
| *Kharif* /Summer  Vegetables | Flowering/  Fruiting | * Land preparation is advised for *kharif* vegetables. For healthy crop production, application of FYM/compost is advised during land preparation. * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * To protect the summer vegetables from leaf feeder/fruit borer insect-pest, spraying of Di-methoate 30 EC @1-1.5ml/L of water is advised. |
| Livestock | **-** | In view of increasing temperature, provide clean water to the milch animals and keep them in the shaded place in day hour. Vaccination of cattles is advised against Anthrax, Black Quarter and H.S. diseases. |

**(A. Sattar)**

**(Nodal Officer)**