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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **5** | **10** | **5** | **0** | **2** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **36** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **4** | **5** | **5** | **7** | **3** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **0** | **1** | **2** | **2** | **5** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **5** | **5** | **0** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **35** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **3** | **2** | **6** | **1** | **1** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **1** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **1** | **2** | **1** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **36** | **37** | **37** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **5** | **4** | **4** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **35** | **36** | **37** | **37** | **37** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Siwan)**

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| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **37** | **37** | **38** | **39** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
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| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* Maize/  Mung bean/  Urd bean | Harvesting | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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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. 46**  **Date: Tuesday, 11 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 37.7°C and 27.1°C, respectively. Average relative humidity was 80 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 30.5°C at 0700 hrs and 39.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 7.5km/hr, 8.5 hours and 6.5mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(Vaishali)**

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| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **3** | **0** | **0** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **37** | **37** | **38** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
| *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. * Complete the nursery sowing of long duration varieties of paddy such as *Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam* and *Kishor* at the earliest. |
| *Kharif* /Summer Maize | Sowing | * Sowing of *kharif* maize is advised. *Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3* and *Ganga 11* varieties are suitable for sowing in North Bihar. Application of 100 quintals of FYM, 30 kg Nitrogen, 60 kg Phosphorus and 50 kg potash per hectare is advised during land preparation. Before sowing, check the proper moisture in the soil. Lack of soil moisture results poor germination. * Regular monitoring is advised for stem borer insect-pest in late sown summer maize. Give irrigation in the crop as per soil moisture status. |
| *Kharif* onion | Land preparation/ Nursery  sowing | Land preparation/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. |
| 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. |
| Elephant foot yam | Sowing | * Complete the sowing of elephant foot yam at the earliest. *Gajendra* variety is recommended for sowing in North Bihar. * For proper growth, give irrigation in elephant foot yam crop which sown in the last month. |
| Vegetables | Flowering/  Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd etc. * Regular monitoring is advised against attack of insect-pest and diseases. If any insect-pests/diseases attack seen in the crop, recommended pesticides should be applied. Give irrigation in the vegetables in case of poor soil moisture. |
| 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)**

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**Medium Range Weather Forecast**

**(12-16 June, 2019)**

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **12**  **June** | **13**  **June** | **14**  **June** | **15**  **June** | **16**  **June** | **Remarks** |
| **Rainfall(mm)** | **5** | **3** | **5** | **4** | **3** | **Mainly dry weather, Chances of drizzle/light rainfall at isolated places** |
| **Max. T (°C)** | **36** | **37** | **37** | **38** | **38** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **27** |
| **Cloud cover (okta)** | **4** | **2** | **3** | **7** | **8** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **35** | **35** |  |
| **Wind speed (kmph)** | **15** | **15** | **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 | * In view of mainly dry weather in forecast period, harvesting and threshing of *rabi* maize is advised. Picking of matured pods of mung bean and urd bean is also advised. * To see the possibility of drizzle/light rainfall at isolated places, farmers are advised to take precaution in agricultural operations. |
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| 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)**