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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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **12** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **7** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **2** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **6** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** | **Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **7** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **5** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **0** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
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| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
 |
| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and 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. 24****Date: Tuesday, 26 March,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 32.9°C and 15.2°C, respectively. Average relative humidity was 78 percent at 0700 hrs and 39 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs and 32.7°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.5km/hr, 8.5hours and 5.1mm, respectively. At the center, about 3.2 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **4** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **1** | **0** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

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| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| During the preceding 12 hours, there has been light rainfall at many places in the North Bihar districts. This has brought moisture in the soil. Taking advantage of soil moisture, farmers are advised to apply nitrogenous fertilizer in late sown maize, early spring maize, vegetables and fodder crop.  |
| Green gram/Black gram | Sowing | Taking advantage of soil moisture, farmers are advised to sow green gram *(mung bean)* & black gram *(urd)* as priority bases. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. *Pusa Vishal, Samrat, SML-668, HUM-16 and Sona* varieties for *mung bean* and *Pant Urd-19 and Pant Urd-31, Uttra and Navin* varieties of *urd* are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with *rhizobium* culture.  |
| Elephant foot yam | Land Preparation/Sowing | Sowing of elephant foot yam is advised. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Fodder crop | Sowing | Sowing of *Kohwa* varieties of jowar is advised. Cowpea is intercropping with jowar is suggested.  |
| Onion | Vegetative/Bulb initiation | Intercultural operation is advised in onion crop. Regular monitoring is also suggested for insect-pests and diseases infestation.  |
| Vegetables | Sowing/Seedlings/Early vegetative | * Complete the sowing of summer vegetables at the earliest. Intercultural operation is advised in 20-25 days old summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for insect–pest infestation in okra. If infestation occurs, spraying of Malathion 50EC or Dimethoate 30EC @ 1.0ml/liter of water is advised.
* Monitoring of red pumpkin beetle is advised in cucurbitaceous vegetables, which are in seedling stage. This is a very harmful insect pest. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation result in the death of the plant or retardation of growth. Dusting of Chlorpyriphos 2% dust @20 kg/hectare near root of the plant is advised for control of grubs infestation. In severe cases, spraying of Dichlorvos76EC@1 ml/liter of water is advised.
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| Brinjal, Tomato and Chilli | Fruiting | Farmers are advised to protect these crops against attack of insect-pest and diseases. |

**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(27-31 March, 2019)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****March** | **28****March** | **29****March** | **30****March** | **31****March** | **Remarks** |
| **Rainfall(mm)** | **12** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **32** | **31** | **32** | **33** | **33** | **-** |
| **Mini. T (°C)** | **17** | **17** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **6** | **0** | **2** | **1** | **0** | **Mainly clear sky**  |
| **Max Relative Humidity (%)** | **75** | **75** | **70** | **70** | **70** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
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