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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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **7** | **5** | **5** | **5** | **15** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **3** | **5** | **3** | **5** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **10** | **5** | **15** | **10** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **3** | **5** | **10** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **10** | **2** | **5** | **3** | **5** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **4** | **2** | **3** | **3** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **2** | **5** | **2** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **0** | **0** | **10** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **2** | **5** | **2** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **10** | **3** | **15** | **8** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(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. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Siwan)**

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| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **5** | **2** | **5** | **5** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(A. Sattar)**

**(Nodal Officer)**

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| **Bulletin No. 60**  **Date: Tuesday, 30 July,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 31.8°C and 26.5°C, respectively. Average relative humidity was 90 percent at 0700 hrs and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 29.6°C at 0700 hrs and 31.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 10.5km/hr, 5.8 hours and 3.5mm, respectively. At the center, about 14.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **2** | **2** | **2** | **2** | **10** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Kharif* paddy | Transplanting | * Priority should be given for transplanting of rice in low and medium land areas. Complete the transplanting at the earliest. * Farmers are advised to take action for controlling of weeds in the rice field within 3 to 7 days of transplanting by spraying a solution of [*Butachlor@3.0*](mailto:Butachlor@3.0) *liters or* [*Pritlachlor@1.5liter*](mailto:Pritlachlor@1.5liter)*s or* [*Pendimethaline@3.0*](mailto:Pendimethaline@3.0) *liters* in 500-600 liters of water applicable for one hectare. |
| *Kharif* onion | Land preparation/  Transplanting | * Land preparation is advised for *kharif* onion. Application of 150-200 quintals of cow dung/hectare, 60 kg Nitrogen, 80 kg Phosphorus and 80 kg Potash is advised during land preparation. * Transplanting of 45-50 days old onion seedlings is advised in raised seedbed at a distance of 15X10 cm. The size of seed bed may be 3X2m or 5x2 m. * Protect the late sown onion nursery against attack of insect-pests and diseases. Weeding is also advised. |
| Pigeon Pea *(Arher)* | Sowing | * Complete the sowing of Pigeon pea in upland areas without any further delay. Application of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg sulphur/ha is advised during land preparation. * *Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13* varieties of pigeon pea are recommended for sowing in North Bihar. Seed rate@18-20 kg/ha is suggested. Seed should be treated with thiram/Capton @2.5gm/kg of seed. |
| Vegetables | - | * Weeding is advised in last month sown *kharif* vegetables. Protect the vegetables crop from attack of insect-pest and diseases. * Monitoring of sucking insect pests such as white fly, leaf hopper and aphid is advised in vegetable nursery. These insect-pests cause viral infections in nursery. For management, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear days. |
| Chili | Nursery sowing | Nursery sowing of chili in raised seedbed is advised. Improved varieties such as *Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol* and Hybrid varieties such as *Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267* of chili are recommended for sowing in North Bihar. Seed should be treated with Thiram75% dust before sowing. |
| Fruit plants | Planting | Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. |
| Tree plantation | Planting | Weather is suitable for planting of forest trees such as *Sagwan, Chah, Hara Simal, Desi Simal, Safed Shirish, Kala Shirish, Arjun, Gamhar, Gulmoha*r. Use stamp or saplings of these trees for this purpose. |
| Animal care | - | Prophylactic measures against contagious diseases for milch animals are advised as per instruction of veterinarians. Hygiene should be maintained at the place where animals are kept. |

**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(31 July- 4 August, 2019)**

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **31**  **July** | **1**  **August** | **2**  **August** | **3**  **August** | **4**  **August** | **Remarks** |
| **Rainfall(mm)** | **8** | **5** | **15** | **8** | **5** | **Chances of scattered rainfall at isolated places** |
| **Max. T (°C)** | **32** | **32** | **33** | **34** | **33** | **-** |
| **Mini. T (°C)** | **25** | **26** | **26** | **27** | **26** |
| **Cloud cover (okta)** | **7** | **6** | **7** | **6** | **7** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **85** | **85** |  |
| **Min Relative Humidity (%)** | **75** | **75** | **75** | **70** | **70** |  |
| **Wind speed (kmph)** | **10** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
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**(A. Sattar)**

**(Nodal Officer)**