|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday,29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs.and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam& Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zincsulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchifrom the infestation of powdery mildew, spraying of sulpherbased fungicide @1.0ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetablessuch as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard.For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigationis advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato,brinjal,chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem andlucern is advised at an interval of 25-30 days.Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**

|  |
| --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)****AGRO-METEOROLOGY DIVISION****Dr. Rajendra Prasad Central Agricultural University, Pusa****Samastipur, Bihar -848 125** |
| **Bulletin No. 9****Date: Tuesday, 29th January, 2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 23.1°C and 12.4°C, respectively. Average relative humidity was 93 percent at 0700 hrs. and 65 percent at 1400 hrs. Soil temperature at 5 cm depth was 13.9°C at 0700 hrs.and 21.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 3.4km/hr, 5.7 hours and 1.8mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(30th January-3 February, 2019)**

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **30****January** | **31****January** | **1****February** | **2****February** | **3****February** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Mainly dry weather** |
| **Max. T (°C)** | **21** | **22** | **22** | **23** | **23** | **-** |
| **Mini. T (°C)** | **8** | **8** | **9** | **10** | **10** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Partially cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **55** | **55** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Elephant foot yam & Turmeric | Maturing | In view of dry weather, harvesting of matured crop of elephant foot yam and turmeric is advised on priority basis. |
| Wheat |  Late tillering/booting | * Give 3rd irrigation in the timely sown wheat crop which is in 60-65 days stage.
* Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 liters of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in crop field.
* In order to protect the late sown wheat crop from termite infestation, application of the mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised in the evening hours and thereafter irrigation is suggested.
 |
| Potato | Vegetative/tuber formation | * Regular monitoring is advised for attack of cut worm in late sown potato crop. This is a highly destructive insect insect-pest, which damages the potato crop. During night, larvae cut the plants at ground level at early stages of potato. During later phases of crop growth, the branches and leaves are cut and destroyed. After formation of the tuber, the larvae cut holes in the tuber and consume their contents. If infestation is observed in the crop field, spraying of Chlorpyriphos20EC@2.5-3 ml per liter of water is advised.
* Weeding is advised in late sown potato crop. Give irrigation as per status of soil moisture.
* Harvesting of matured crop of early varieties of potato is advised.
 |
| Mango /Litchi Orchard | - | * It is time for flowering initiation in mango and litchi. Under this condition, farmers are advised to stop intercultural operation in the orchard.
* Spraying of Imadaclorprid17.8SL or Cypermethrin10EC @1ml /liter of water is advised on the foliage of the trees. This will protect mango and litchi orchards from the infestation of hoppers and mealy bug.
* To protect the mango and litchi from the infestation of powdery mildew, spraying of sulpher based fungicide @1.0 ml/liter of water on the foliage of the trees is advised.
 |
| Pigeon Pea | Flowering | Regular monitoring is advised for infestation of pod borers in pigeon pea, which is in flowering /pod formation stages. The larvae enter the pod and feed on the seeds. If infestation is found, spraying of Cartap hydrochloride @ 1.5ml/L of water is advised. |
| Vegetables | - | * Land preparation is advised for sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard, bitter guard. For healthy production of vegetables, application of 15-20 ton FYM is advised during land preparation. To protect the vegetable crops from cutworm attack, application of mixture of 20-30kg sand with Chlorpyriphos 20EC@2 liters/acre is advised during land ploughing.
* Weeding and light irrigation is advised in standing vegetables crop such as cabbage, late sown cauliflower, tomato, brinjal, chilli, pea etc. Regular monitoring is advised against attack of insect-pests and diseases.
 |
| Fodder crops | Maturity/harvesting |  Harvesting of oats, barseem and lucern is advised at an interval of 25-30 days. Thereafter, provide irrigation and apply 10 kg nitrogen/hectare. |

**(A. Sattar)**

**(Nodal Officer)**