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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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **10** | **20** | **20** | **20** | **30** | **Light to medium** |
| **Max. T (°C)** | **34** | **34** | **34** | **33** | **33** | **Maximum temperature will remain between 33-34°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **26** | **26** | **26** |
| **Cloud cover (okta)** | **7** | **7** | **6** | **8** | **6** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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** | | |
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**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **30** | **30** | **30** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **32** | **32** | **31** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **26** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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** | | |
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**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **20** | **40** | **40** | **20** | **Light to medium** |
| **Max. T (°C)** | **34** | **33** | **32** | **31** | **32** | **Maximum temperature will remain between 31-34°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **26** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and hygiene should be maintained at the place where animals are kept. |

**(A. Sattar)**

**(Nodal Officer)**

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According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **30** | **40** | **40** | **20** | **Light to medium** |
| **Max. T (°C)** | **33** | **33** | **32** | **31** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **26** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Westerly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
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**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **20** | **20** | **20** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **33** | **34** | **33** | **32** | **Maximum temperature will remain between 32-34°C and the minimum between**  **25-26°C.** |
| **Mini. T (°C)** | **26** | **26** | **26** | **26** | **25** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Westerly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
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| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **30** | **30** | **30** | **40** | **Light to medium** |
| **Max. T (°C)** | **33** | **32** | **32** | **31** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **27** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **6** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **30** | **30** | **30** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **32** | **32** | **31** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **27** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **6** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **40** | **40** | **40** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **32** | **32** | **31** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **27** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **7** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **10** | **10** | **20** | **10** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **33** | **32** | **32** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **25-26°C.** |
| **Mini. T (°C)** | **26** | **26** | **26** | **26** | **25** |
| **Cloud cover (okta)** | **8** | **8** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Westerly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
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| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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** | | |
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**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **20** | **30** | **50** | **40** | **Light to medium** |
| **Max. T (°C)** | **33** | **33** | **32** | **32** | **31** | **Maximum temperature will remain between 31-33°C and the minimum between**  **25-26°C.** |
| **Mini. T (°C)** | **26** | **26** | **26** | **26** | **25** |
| **Cloud cover (okta)** | **8** | **8** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Westerly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **40** | **40** | **40** | **30** | **Light to medium** |
| **Max. T (°C)** | **33** | **32** | **31** | **31** | **32** | **Maximum temperature will remain between 31-33°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **27** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **6** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and 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. 63**  **Date: Friday, 31st August, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 33.0°C and 26.1°C respectively. Average relative humidity was 91 percent at 0700 hrs. and 74 percent at 1400 hrs. Soil temperature at 5 cm depth was 28.2°C at 0700 hrs. and 32.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.1 km/hr, 7.5 hours and 3.9 mm respectively. At the center, about 23.4 mm rainfall has been recorded.

**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **15** | **30** | **30** | **40** | **40** | **Light to medium** |
| **Max. T (°C)** | **34** | **33** | **32** | **32** | **32** | **Maximum temperature will remain between 32-34°C and the minimum between**  **25-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **27** | **25** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
| Cabbage | Nursery sowing | Nursery sowing of early varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate, and early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition. |
| Pointed guard *(Parwal)* | Planting | Complete the planting of *Rajendra parwal-1, Rajendra Parwal-2, FP-1, FP-3, Swarm rekha, Swarn allokik, IIVR-1* varieties of pointed guard at the earliest. |
| Radish | Sowing | Sowing of early varieties of radish such as *Pusa chetki, Pusa desi, Jounpuri, Pusa himani, Japani safed, Pusa rashmi, Punjab safed and Arka nishant* are advised in North Bihar region. The planting distance should be maintained at 25X10 cm. Seed rate @4-5 kg/hectare is suggested. |
| *Kharif* Maize | Tasseling | Application of nitrogen @30 kg per hectare is advised in *kharif* maize which is in tasseling stage. |
| Paddy | Vegetative | * Regular monitoring is advised for infestation of leaf folder in paddy crop. The larva of insect rolls the leaf blade by fastening its edges and sometimes even fastening the leaf tip to the basal part of the leaf blade and feeds by scraping inside the fold. The leaf becomes membranous and turns white. If infestation is observed, application of Cartap Hydrochloride 4G (*Caldan) @*10kg/acre is advised. * Regular monitoring of brown plant hopper (BPH) in paddy crop is advised. This mosquito type insect-pest may be seen at the basal portion of the plant in the middle of the crop field. The adults and nymphs suck the sap; resulting in reddening of leaves in the beginning and subsequently drying of leaves. In case of heavy infestation, the rice leaves turn brown and plants fail to produce ears. Reduction in the tillering of plants is also seen in the field. To protect the crop, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 liter of water is advised in clear day condition. |
| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and hygiene should be maintained at the place where animals are kept. |

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**(Nodal Officer)**

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**Medium Range Weather Forecast**

**(1 -5th September, 2018)**

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1st**  **September** | **2nd**  **September** | **3rd**  **September** | **4th**  **September** | **5th**  **September** | **Remarks** |
| **Rainfall(mm)** | **20** | **30** | **40** | **40** | **20** | **Light to medium** |
| **Max. T (°C)** | **34** | **33** | **32** | **31** | **32** | **Maximum temperature will remain between 31-34°C and the minimum between**  **26-27°C.** |
| **Mini. T (°C)** | **27** | **27** | **26** | **26** | **26** |
| **Cloud cover (okta)** | **8** | **7** | **7** | **8** | **8** | **Mainly cloudy sky** |
| **Max Relative Humidity (%)** | **95** | **95** | **100** | **100** | **95** |  |
| **Min Relative Humidity (%)** | **70** | **70** | **75** | **75** | **70** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Westerly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| September Pigeon pea  *(Arhar)* | Sowing | In upland areas, sowing of *Pusa-9* and *Sarad* varieties of September pigeon pea is advised. The weather condition for its sowing is getting favorable. During land preparation, application of 20kg/ha Nitrogen, 45kg/ha Phosphorus, 20 kg/ha Potash and 20 kg sulphur/ha is advised. Seeds should be treated with Thiram/Capton @2.5gm/kg of seed. |
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| Green gram/Black gram | Fruiting | Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This is caused by white fly. If infestation (diseased plant) is seen in the crop field, spraying of Imidacloprid @ 0.3ml/litre of water is advised in clear day condition. |
| Animal care | - | Farmers are advised that they should not feed the milch animals drenched fodder or other feeds in order to protect them from infectious disease. The feet of animals should be washed with the solution of potassium permanganate to avoid mastitis disease. It is advised not to allow the animals to sit on floor immediately after milking. It is advised to wash the udders of the animals after milking. Farmers can check the incidence of subclinical mastitis by testing pH value of milk with litmus paper. If pH of milk exceeds above 7.0, *Mammidium, Mastikill, Mammiup* medicines should be applied and feeding of mineral mixture@50 gram/animal /day is advised. Proper sanitation and hygiene should be maintained at the place where animals are kept. |

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