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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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **10** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
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**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **5** | **10** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
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| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
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| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **10** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **2** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
 |

**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **20** | **10** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **3** | **3** | **3** | **0** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
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**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **5** | **20** | **10** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
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 |

**(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. 37****Date: Friday, 10 May,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(11-15 May, 2019)**

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **5** | **5** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
* Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation of is found, spraying of Dimethoate 30 EC @ 2 ml+10 gram sugar /liter of water is advised. Intercultural operation is also advised in summer vegetables.
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**(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. 37****Date: Friday, 10 May,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 40.9°C and 24.9°C, respectively. Average relative humidity was 68 percent at 0700 hrs and 45 percent at 1400 hrs. Soil temperature at 5 cm depth was 31.7°C at 0700 hrs and 41.6°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 6.4km/hr, 9.3hours and 5.0mm, respectively. Dry weather prevailed during the previous forecasting period.

**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **10** | **1** | **Light rainfall during 13-14 May** |
| **Max. T (°C)** | **40** | **40** | **38** | **37** | **37** | **-** |
| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **4** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| In view of rainfall during 13-14 May, farmers are advised to take utmost care in harvesting and threshing of *rabi* maize and spraying of pesticides in the standing crops. Farmers are also advised to postpone irrigation.  |
| Turmeric | Land preparation | Sowing of turmeric is advised from 15th May. *Rajendra Sonia* and *Rajendra Sonali* varieties are recommended for sowing in North Bihar. Application of 25-30 tons of cow dung, 60-75 kg nitrogen,50-60 kg phosphorus,100-120 kg potassium and 20-25 kg zinc sulphate per hectare is advised during land preparation. Also advised to arrange the seed from authentic resources. |
| Ginger | Land preparation | Sowing of *Maran* and *Nadia* varieties of ginger is advised from 15th May. Application of 25-30 tones of cow dung, 30-40 kg nitrogen,50 kg phosphorus,80-100 kg potassium 20-25 kg zinc sulphate and 10-12 kg borax per hectare is advised during land preparation.  |
| *Kharif* Maize | Land preparation | Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.  |
| Paddy | Land preparation | Land preparation is advised for paddy nursery. During land preparation, application of cow dung is suggested for good and healthy seedlings.  |
| Elephant foot yam | Sowing | Complete the sowing of elephant foot yam at the earliest. Application of 10-15 ton FYM, 40 kg Nitrogen, 60kg Phosphorus and 80 kg Potash per hectare is advised during land preparation. *Gajendra* variety is recommended for sowing in North Bihar. Seed should be treated with *Trichoderma viridi* before sowing. Seed rate@ 80 quintals/hectare is advised. |
| Green gram/ Black gram | Flowering/Fruiting | * Monitoring is advised against attack of hairy caterpillars in the late sown crop. The caterpillars which are profusely covered with long greyish hairs eat foliage, soft portion of stem and branches. In severe cases of infestation, the plants may be completely denuded of leaves. For management of insect-pest, spraying of Methyl parathion 50EC@2.0ml/liter or Chlorpyriphos 20 EC@2.5ml/liter of water is advised in clear days.
* Monitoring is advised for yellow vein mosaic virus (YMV) disease in green gram and black gram. This disease is spread by white fly. If infestation is found, spraying of Imidacloprid17.8 S L@0.3ml/liter of water is suggested. Affected plants are to be uprooted and destroyed before spraying.
 |
| Vegetables | Flowering/Fruiting | * Intercultural operation is advised in summer vegetables such as lady’s finger, pumpkin, cucumber, sponge gourd, bottle gourd.
* Monitoring is advised for infestation of fruit and shoot borer in okra. If infestation found, spraying of Malathion 50EC@ 1.0ml/liter or Dimethoate 30EC@1.5 ml/liter of water is advised.
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**(A. Sattar)**

**(Nodal Officer)**

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| **Bulletin No. 37****Date: Friday, 10 May,2019** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  |

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**Medium Range Weather Forecast**

**(11-15 May, 2019)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **11****May** | **12****May** | **13****May** | **14****May** | **15****May** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **10** | **5** | **Light rainfall during 13-14 May** |
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| **Mini. T (°C)** | **24** | **24** | **23** | **22** | **23** |
| **Cloud cover (okta)** | **0** | **2** | **3** | **6** | **5** | **Cloudy weather** |
| **Max Relative Humidity (%)** | **80** | **80** | **75** | **75** | **70** |  |
| **Min Relative Humidity (%)** | **60** | **60** | **50** | **50** | **50** |  |
| **Wind speed (kmph)** | **15** | **15** | **15** | **10** | **10** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Eassterly** | **Easterly** | **Easterly** | **Westerly/easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
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