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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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 26 | 26 | 26 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 12 | 12 | 10 | 10 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

**(A. Sattar)**

**(Nodal Office)**

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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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 27 | 27 | 26 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 12 | 10 | 10 | 9 | 11 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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**

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 27 | 27 | 27 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 10 | 11 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 60 | 60 | 60 | 60 | 60 |  |
| Min Relative Humidity (%) | 30 | 30 | 30 | 30 | 30 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
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| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 27 | 26 | 27 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 9 | 10 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
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| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 27 | 27 | 27 | 28 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 12 | 12 | 11 | 12 | 13 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
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| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

**(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 27 | 27 | 27 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 12 | 11 | 10 | 11 | 11 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 26 | 26 | 26 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 12 | 11 | 10 | 10 | 12 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 26 | 26 | 26 | 27 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 14 | 13 | 12 | 10 | 11 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 26 | 26 | 26 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 9 | 10 | 11 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Sitamadhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 27 | 27 | 27 | 26 | 26 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 9 | 9 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
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| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 27 | 27 | 27 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 9 | 10 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(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. 90****Date: Tuesday, 21 November, 2017**  | **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 30.2°C and 15.6°C respectively. Average relative humidity was 84 percent at 0700 hrs. and 60 percent at 1400 hrs. Soil temperature at 5 cm depth was 18.0°C at 0700 hrs. and 28.2°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.4 km/hr, 6.4 hours and 3.4 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 27 | 27 | 27 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 13 | 12 | 12 | 12 | 12 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 40 | 40 | 40 | 40 | 40 |  |
| Min Relative Humidity (%) | 20 | 20 | 20 | 20 | 20 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Wheat | Sowing | Temperature and other Agrometeorological conditions have become congenial for sowing of wheat crop.*PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties are recommended for timely sowing. Application of 15-20 ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Maize | Sowing | Present weather is favorable for sowing of *rabi* maize. The optimum time for sowing of maize in north Bihar during 15-25 November. *Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala*varieties of hybrid maizeand*Dewki white, Lakshmi white and Suaan yellow* varieties of composite maize are recommended. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed. Application of 10-15 ton FYM ,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare is advised before sowing.  |
| Potato | Planting | Farmers are suggested to continue the planting of potato. *Kufri jyoti, Kufri ashoka, Kufri pukharaj, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri girdhari, Kufri sadabahar,Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3,*varieties are recommended for planting in north Bihar region. Seed rate@25-30q/ha and distance of 50-60cm line to line and 15-20cm plant to plant are advised. Application of 20-25 tones FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash per hectare is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised. |
| Lentil*(Masur)* | Sowing | Complete the sowing of lentil. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar.  |
| Gram | Sowing | Sowing of gram is advised. *Pusa-256, KPG-59(Udai), and Pusa-372* varieties are recommended for sowing in north Bihar region. Seed should be treated with Vitavax@2gm/kg. To protect against *kajla caterpillar (cut worm)*, seed should be treated with chlorpyrifos@8ml/kg. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulpher per hectare is advised during land preparation. Seed rate@75-80 kg/ha and distance of 30cm X 10cm is advised.  |
| Vegetables  | - | Weeding is advised in vegetables. Provide light irrigation in vegetables such as cauliflower, cabbage, tomato, pea, chilli, brinjal, garlic etc as per soil moisture.  |
| Cauliflower/Cabbage | - | Monitoring is advised for infestation of leaf feeders in cabbage & cauliflower. If insect population is found above ETL (Economic Threshold Level), then spraying of Spinosad @1 ml / 3 liters of water is advised.  |

 **(A. Sattar)**

**(Nodal Officer)**

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**Medium Range Weather Forecast**

 **(22nd -26th November, 2017)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **22nd** **November** | **23rd****November** | **24th****November** | **25th** **November** | **26th** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 27 | 27 | 27 | 27 | Maximum temperature will remain between 26-28°C and the minimum around 10-12°C. |
| Mini. T (°C) | 11 | 10 | 10 | 11 | 10 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 60 | 60 | 60 | 60 | 60 |  |
| Min Relative Humidity (%) | 30 | 30 | 30 | 30 | 30 |  |
| Wind speed (kmph) | 5 | 5 | 5 | 5 | 5 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
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**(Nodal Officer)**