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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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

**(Begusarai)**

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| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 28 | 28 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 19-20°C. |
| Mini. T (°C) | 18 | 18 | 18 | 17 | 16 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 28 | 28 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 16-18°C. |
| Mini. T (°C) | 18 | 18 | 18 | 17 | 16 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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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**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 29 | 29 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 16-19°C. |
| Mini. T (°C) | 21 | 20 | 20 | 19 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
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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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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**

 **(18th -22nd November, 2017)**

 **(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 30 | 30 | 29 | 29 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 16-19°C. |
| Mini. T (°C) | 21 | 20 | 19 | 19 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
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| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
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| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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**

 **(18th -22nd November, 2017)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
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| Max. T (°C) | 28 | 28 | 28 | 28 | 28 | Mainly dryMaximum temperature will remain between 26-29°C and the minimum around 16-18°C. |
| Mini. T (°C) | 18 | 18 | 17 | 17 | 16 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

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

**(Nodal Officer)**

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| **Bulletin No. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 28 | 28 | 28 | 28 | Maximum temperature will remain between 25-29°C and the minimum around 16-18°C. |
| Mini. T (°C) | 19 | 19 | 18 | 18 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 28 | 28 | 28 | Maximum temperature will remain between 25-28°C and the minimum around 16-18°C. |
| Mini. T (°C) | 18 | 18 | 18 | 17 | 16 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 28 | 28 | 28 | Maximum temperature will remain between 25-29°C and the minimum around 16-19°C. |
| Mini. T (°C) | 19 | 19 | 18 | 18 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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**

 **(18th -22nd November, 2017)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 28 | 28 | 28 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 16-19°C. |
| Mini. T (°C) | 19 | 19 | 18 | 18 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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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**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Sitamadhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
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| Mini. T (°C) | 19 | 19 | 18 | 18 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
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| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
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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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 30 | 30 | 29 | 29 | 28 | Maximum temperature will remain between 26-29°C and the minimum around 16-19°C. |
| Mini. T (°C) | 21 | 20 | 19 | 19 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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. 89****Date: Friday, 17 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 29.2°C and 17.4°C respectively. Average relative humidity was 88 percent at 0700 hrs. and 57 percent at 1400 hrs. Soil temperature at 5 cm depth was 19.5°C at 0700 hrs. and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 2.5 km/hr, 7.4 hours and 1.8 mm respectively. Mainly dry weather prevailed during this period.

**Medium Range Weather Forecast**

 **(18th -22nd November, 2017)**

 **(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 28 | 28 | 28 | 28 | 28 | Maximum temperature will remain between 29-30°C and the minimum around 15-17°C. |
| Mini. T (°C) | 19 | 19 | 18 | 18 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
| Potato | Sowing | Planting of potato is advised. *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 line to line distance of 50-60cm and plant to plant 15-20cm are advised. Application of 200-250 q/ha FYM, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation.  |
| Lentil*(Masur)* | Sowing | Try to finish the sowing of lentil before 20th November. *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5* varieties are recommended for sowing in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains and line to line distance of 30cm is advised. Seed should be treated with rhizobium culture (5packets/hectare). Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised during land preparation.  |
| Gram | Sowing | Continue 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.  |
| Paddy | Harvesting | Farmers are advised to complete the harvesting and threshing of paddy giving top priority. |
| 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**

 **(18th -22nd November, 2017)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **18th** **November** | **19th****November** | **20th****November** | **21st** **November** | **22nd** **November** | **Remarks** |
| Rainfall(mm) | 0 | 0 | 0 | 0 | 0 | Mainly dry |
| Max. T (°C) | 29 | 29 | 29 | 29 | 28 | Maximum temperature will remain between 27-29°C and the minimum around 17-19°C. |
| Mini. T (°C) | 21 | 20 | 20 | 19 | 18 |
| Cloud cover (okta) | 0 | 0 | 0 | 0 | 0 |  |
| Max Relative Humidity (%) | 85 | 85 | 80 | 80 | 80 |  |
| Min Relative Humidity (%) | 55 | 55 | 50 | 50 | 45 |  |
| Wind speed (kmph) | 4 | 6 | 8 | 6 | 4 |  |
| Wind direction(deg) | westerly | westerly | westerly | westerly | westerly | westerly |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| Crops | Phenophases | Advisory (Based on weather forecast) |
| Maize | Sowing | Sowing of *rabi* maize is advised. Application of 100-150 q/ha FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. *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 for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.  |
| Wheat | Sowing | Start sowing of timely sown wheat crop as weather is congenial for the proper germination of crop. Recommended timely sown and irrigated varieties are *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39*. Application of 150-200q/ha FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. |
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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.  |
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 **(A. Sattar)**

**(Nodal Officer)**