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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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **30** | **31** | **31** | **30** | **31** | **-** |
| **Mini. T (°C)** | **19** | **20** | **20** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **1** | **1** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **6** | **6** | **6** | **6** | **6** |  |
| **Wind direction(deg)** | **Westerly** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **18** | **18** | **19** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **6** | **6** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **18** | **18** | **19** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **6** | **6** | **6** | **6** | **6** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **18** | **18** | **19** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **6** | **6** | **6** | **6** | **6** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **19** | **19** | **19** | **18** | **18** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **2** | **2** | **3** | **3** | **3** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **31** | **31** | **-** |
| **Mini. T (°C)** | **18** | **18** | **18** | **18** | **18** |
| **Cloud cover (okta)** | **0** | **0** | **1** | **1** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **3** | **3** | **3** | **3** | **3** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **30** | **31** | **31** | **31** | **31** | **-** |
| **Mini. T (°C)** | **19** | **20** | **20** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **1** | **1** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **19** | **20** | **19** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **1** | **1** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **30** | **31** | **31** | **31** | **-** |
| **Mini. T (°C)** | **19** | **19** | **19** | **18** | **18** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **6** | **6** | **6** | **6** | **6** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **30** | **31** | **31** | **31** | **-** |
| **Mini. T (°C)** | **19** | **19** | **19** | **18** | **18** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **30** | **30** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **6** | **5** | **5** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **19** | **19** | **18** | **18** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **18** | **18** | **17** | **17** | **17** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **5** | **5** | **5** | **5** | **5** |  |
| **Wind direction(deg)** | **Westerly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly/Westerly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm 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. 77****Date: Friday, 26th October, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** |  **Phone No : 06274-240266** |

**Weather during the previous forecast period**

According to meteorological data recorded at Agro meteorological Observatory, Pusa (Bihar), average maximum and minimum temperature were 31.5°C and 14.2°C respectively. Average relative humidity was 85 percent at 0700 hrs. and 44 percent at 1400 hrs. Soil temperature at 5 cm depth was 21.3°C at 0700 hrs. and 30.0°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.3 km/hr, 7.8 hours and 3.2 mm respectively. No rainfall was recorded during this period.

**Medium Range Weather Forecast**

**(27- 31 October, 2018)**

 **(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **27****October** | **28****October** | **29****October** | **30****October** | **31****October** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **31** | **31** | **31** | **30** | **30** | **-** |
| **Mini. T (°C)** | **18** | **18** | **19** | **19** | **19** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **0** | **Mainly clear sky** |
| **Max Relative Humidity (%)** | **80** | **80** | **80** | **80** | **80** |  |
| **Min Relative Humidity (%)** | **40** | **40** | **40** | **40** | **40** |  |
| **Wind speed (kmph)** | **6** | **6** | **6** | **6** | **6** |  |
| **Wind direction(deg)** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** | **Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| *Rabi* crops | - | * As fag end of monsoon remained almost dry over north Bihar, soil moisture status remained very poor. In the background of this and following dry weather forecast, farmers are advised to bring soil moisture of their fields to normal level by giving light irrigation to ensure proper germination of crops. Regular monitoring is also advised against infestation of insect pest/diseases.
* Field sanitization and land preparation is advised for *rabi* crops. Bunds, channels and fields roads should be also cleaned by removing of weeds. Application of well decomposed FYM@150-200 quintal/ha is advised. Ploughing and planking should be done properly to conserve the moisture in the soil.
 |
| Potato | Land preparation/Planting | Thermal regime is getting normal for planting of Potato. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima,Kufri sinduri, Kufri arun, Kufri anand,Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3*, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25 ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Treated seed should be used for healthy crop.  |
| Maize | Land preparation | Sowing of maize crop is advised after 1st November. Therefore, farmers are advised to complete the land preparation for *rabi* maize at the earliest. Application of 10-15 ton FYM, 60 kg nitrogen, 75 kg phosphorus, 50 kg Potash per hectare is advised 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 maize and *Dewki white, Lakshmi white and Suwan yellow* varieties of composite maize are recommended for north Bihar.  |
| Mustard/Rai | Sowing | * After germination of mustard crop, plant to plant spacing should be maintained at 12-15 cm by thinning.
* Sowing of *Baruna, Pusa bold, Kranti, Pusa mahak and Rajendra suflam* varieties of rai are recommended for north Bihar region. Seed rate@5kg per hectare and planting distance 30x15 cm is advised. Line sowing is beneficial.
 |
| Pea | Sowing | *Rachna, Malviya Mater-15, Aparna, Harbhajan, Pusa Prabhat* varieties of pea are recommended for sowing in north Bihar. Seed rate @75-80kg per hectare and planting distance of 30x10 cm is advised. Seed should be treated with Rhiozbium culture (5 packets /hectare).  |
| Rabi onion | Nursery sowing | Nursery sowing of rabi onion is advised. *Agri Found Light Red, Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red* varieties of rabi onion are recommended for sowing in north Bihar. Seed rate@8-10 kg/hectare is advised. Always use treated seeds for healthy seedlings. |
| Garlic | Sowing | *Godawari (Selection-1),Shweta(Selection-10), Agrifound dark red(G-11),Agrifound white(G-41),Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323), G-1 and RAU(G-5)* varieties of garlic are suitable for sowing in north Bihar. Seed rate@300-500 kg claws/ha and planting distance of 15 cm x10cm is advised.  |
| Coriander | Sowing | Sowing of coriander is advised. *Rajendra swati, Pant haritima, Kumarganj selection and Hisar anand* varieties of coriander are recommended for sowing in north Bihar. Seed rate@18-20kg/ha and planting distance 30X20 cm is advised.  |
| Lentil | Sowing | Sowing of *Mallika (K-75), Arun (PL77-12), KLS-218, HUL-57, PL-5 and WVL-77* varieties of lentil is recommended in north Bihar. Seed rate@30-35 kg/ha for small grains and 40-45 kg/ha for large grains with planting distance of 30cm is advised.  |

 **(A. Sattar)**

**(Nodal Officer)**