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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. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Begusarai)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Darbhanga)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(East Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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**

**(1-5 December, 2018)**

**(Gopalganj)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
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| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
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| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(A. Sattar)**

**(Nodal Officer)**

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| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Madhubani)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Muzaffarpur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Samastipur)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Saran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
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| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(A. Sattar)**

**(Nodal Officer)**

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| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Shivhar)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
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**(A. Sattar)**

**(Nodal Officer)**

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| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Sitamarhi)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(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. 86**  **Date:Friday,30th November, 2018** | **F:\15349550_1863725520538190_1704492238980604982_n.jpg** | **Phone No : 06274-240266** |

**Weather during the previous forecast period**

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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Siwan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
| *Rabi* Maize | Sowing | * Farmers are advised to complete the sowing of *rabi* maize by the end of this month. * Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field. |
| Potato | Planting | * Complete the planting of potato at the earliest. * Weeding and earthing- up are advised in early sown potato crop, which has attained the height of 15-20 cm. Give light irrigation as per need. |
| *Rai* | Sowing/  weeding | Complete the sowing of late variety of *rai* such as *Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01)*till the end of November. Weeding is advised in 20-25 days old *rai*crop. Thinning is advised to maintain plant to plant spacing at 12-15 cm. |
| Fodder crops | Sowing | Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. |
| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
| **Bulletin No. 86**  **Date:Friday,30th November, 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 27.8°C and 13.2°C, respectively. Average relative humidity was 91 percent at 0700 hrs. and 55 percent at 1400 hrs. Soil temperature at 5 cm depth was 16.0°C at 0700 hrs .and 25.5°C at 1400 hrs. Average wind speed, daily sunshine hours and average daily evaporation were 1.5km/hr, 6.7hours and 2.1mm, respectively. Dry weather prevailed during the previous forecasting period. Early morning fog was observed.

**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(Vaishali)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
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| Gram | Sowing | Present weather is suitable for sowing of gram. Farmers are advised to complete the sowing of gram up to 10th December. *Pusa-256, KPG-59(Udai),KWR-108,pant G-186 and Pusa-372* varieties of gram are recommended for sowing in north Bihar region. Seeds should be treated with [*Vitavax@2.0*](mailto:Vitavax@2.0)*g*m/kg. To protect against *kajra caterpillar (cut worm)*, seeds should be treated with [chlorpyrifos@8ml/kg. Before](mailto:chlorpyrifos@8ml/kg.Before) sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also. Application of 20 kg nitrogen, 45 kg phosphorus, 20 kg potash and 20 kg sulphur per hectare is advised before sowing. |
| Garlic | Vegetative | Weeding is advised. Give light irrigation in garlic crop as per soil moisture. |
| Rabi onion | Seedlings | Farmers are advised to remove weeds from onion nursery at the regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation. |
| Vegetables | - | Weeding is advised. Give irrigation as per status of soil moisture. Regular monitoring is advised for infestation of insect –pest and disease infestation. |

**(A. Sattar)**

**(Nodal Officer)**

|  |  |  |
| --- | --- | --- |
| **GRAMIN KRISHI MAUSAM SEWA (GKMS)**  **AGRO-METEOROLOGY DIVISION**  **Dr. Rajendra Prasad Central Agricultural University, Pusa**  **Samastipur, Bihar -848 125** | | |
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**Medium Range Weather Forecast**

**(1-5 December, 2018)**

**(West Champaran)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Weather parameters** | **1**  **December** | **2**  **December** | **3**  **December** | **4**  **December** | **5**  **December** | **Remarks** |
| **Rainfall(mm)** | **0** | **0** | **0** | **0** | **0** | **Dry weather** |
| **Max. T (°C)** | **28** | **28** | **28** | **27** | **27** | **-** |
| **Mini. T (°C)** | **15** | **15** | **14** | **14** | **14** |
| **Cloud cover (okta)** | **0** | **0** | **0** | **0** | **3** | **Cloudy sky** |
| **Max Relative Humidity (%)** | **90** | **90** | **90** | **90** | **90** |  |
| **Min Relative Humidity (%)** | **45** | **45** | **45** | **40** | **40** |  |
| **Wind speed (kmph)** | **10** | **10** | **10** | **10** | **10** |  |
| **Wind direction(deg)** | **Easterly** | **Westerly** | **Easterly** | **Westerly** | **Westerly** | **Westerly/Easterly** |

**Advisory for the farmers**

|  |  |  |
| --- | --- | --- |
| **Crop** | **Phenophases** | **Advisory (Based on weather forecast)** |
| Wheat | Sowing | * There is depleted soil moisture in the fallow land (after harvesting of paddy), which would affect germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. * Farmers are advised to start sowing of late variety of wheat after 5th December. *PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036* varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. * Farmers are advised to finish the timely sown wheat crop till the 5thDecember for realizing greater growth and productivity. *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HD-2967, HUW-206, HUW-468, K-307, CBW-38, DBW-39* varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20 ton FYM, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised during land preparation. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For broadcasting method, seed rate @ 125kg per hectare is advised and 100 kg per hectare is recommended for seed drill method. Deep sowing of seeds is not advisable. * Seed treatment with chlorpyriphos 20EC@ 8 ml/kg of seeds is advised in termite affected land. |
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**(A. Sattar)**

**(Nodal Officer)**