

# Summary of Agromet Advisory Services for different States of the country Issued by

# Agricultural Meteorology Division, India Meteorological Department, Pune, India

# Thursday, 15<sup>th</sup> November, 2007

(For the period 15<sup>th</sup> to 19<sup>th</sup> November, 2007)

The extended version of the bulletin is also available at <a href="http://imdagrimet.org">http://imdagrimet.org</a>

## Agromet Advisory

# North West India (Haryana, Punjab, Rajasthan, Uttar Pradesh, Delhi, Himachal Pradesh, Jammu & Kashmir and Uttarakhand)

## **Punjab**

- Weather remained dry during the period.
- Mainly dry weather is likely over the State.

## **Advisories**

- As there was no rainfall in the State during last few weeks and mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane and horticultural crops.
- Continue sowing of gram and lentil using improved varieties.
- Continue picking of cotton.
- Monitor the sugarcane crop for shoot borer infestation & if exceeds economic threshold level, for effective control spray Endosulfan 50 EC 600 ml in 600 liter of water/acre.
- Preparation of field and sowing of wheat, cabbage, pea, garlic, and potato may be done.

#### Haryana

- No significant rain occurred during the period.
- Mainly dry weather is likely over the State.

## **Advisories**

- As there was no significant rainfall in the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to sugarcane and horticultural crops.
- Continue picking of cotton and harvesting of rice.
- Monitor the sugarcane crop for borer infestation & if exceeds economic threshold level, for effective control, spray 600 ml Endosulfan 50 EC in 600 liter of water/acre.
- Preparation of field and sowing of wheat, carrot, raddish and brinjal may be done.

## Rajasthan

- Weather remained dry in all the divisions of the State.
- Mainly dry weather is likely over the State.

- Continue picking of cotton and harvesting guar. Picking of cotton may be undertaken in the early morning hours to maintain the quality of kapas.
- Undertake ploughing of fields and sowing of *rabi* crops *viz*. mustard, barley, taramira and gram by utilizing residual moisture.

- This is proper time for land preparation and planting of potato in and around Bharatpur. Select among Kufri Jyoti, Kufri Badshah, Kufri Sutlej and Kufri Anand. Maintain spacing of 45-60 cm between rows and 15-20 cm between plants for optimum plant population.
- Undertake land preparation and sowing of wheat. Select varieties from Raj 3077, HD 2329, HD 2236, WH147 and PBW 343. Adopt seed rate of 100 kg / ha. At the time of last ploughing, apply 50-60 kg N and 50 kg P<sub>2</sub>O<sub>5</sub> per ha.

## **Uttar Pradesh**

- Weather was mainly dry in all divisions of the State.
- Weather will be mainly dry in all divisions of the State.

#### **Advisories**

- As there was no rainfall in the State during last week and mainly dry weather is likely over U.P for the next three days, apply irrigation to the crops.
- To overcome malformation disease in mango spray the solution of Naphthalene Acetic Acid, 200 p.p.m or 4ml planofix/9litre in water and mix fertilizer around the stem of mango tree after hoeing.
- Prepare the field and undertake sowing of potato, garlic and pea.
- Complete field preparation and sowing of rai, mustard, gram, pea, masoor and other pulse crop.
- Spray the solution of Dimethoate 1.5 ml/litre of water to control stemborer insect in Turmeric.
- Continue harvesting of rice.
- Sowing of improved varieties of wheat PBW-343, UP-2338, AD-85 and late varieties Malviya-234, Narendra-236, TWT-373 may be done and use seeds rate 125 kg / hectare after seed treatment by Carbendazim and Thiram.
- Sowing of wheat varieties KRL-203, Raj-3077 and Lokwan in barren land may be done by using seeds 25% more than normal. Application of fertilizers may be done on the basis of recommendation of fertilizer after testing the soil.

#### **Himachal Pradesh**

- Weather was mainly dry in all divisions of the State.
- Mainly dry weather is likely over the State.

- As there was no significant rainfall over the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to vegetables and toria crops.
- Also continue harvesting of potato. Continue harvesting of seed potato. Seed potato must be certified by the certification agency.
- There is mild chance of attack of leaf spot disease in cabbage and cauliflower. If attack crosses economic threshold level, spray Dithane M-45 to control the disease.
- Prepare land for sowing of wheat. For securing optimum yield, sowing time for timely sown crops of wheat for the State is last week of October to mid November in low hills and mid hills. 90-100 kg seed / ha is required for timely sown crops.
- Prepare land for sowing of barley. The crop should be sown by kera in lines 22 cm apart. 100 kg seeds per hectare are optimum for sowing. Additional 20 to 25 kg seed should be used under rainfed conditions.
- Prepare land for sowing of gram. Gram should be sown by kera in lines 30 cm apart. Seed should be placed at a depth of 10 to 12.5 cm because the shallow sown crop is more liable to be damaged by wilt. 40 to 45 kg seeds per hectare are required for pure crop of C-235 but in case of HPG-17 the seed rate of 80 kg / ha is recommended.
- Prepare land and complete sowing of rapeseed and mustard crops within this month.

## **Uttarakhand**

- Mainly dry weather prevailed during the period. Sky remained mainly clear to partly cloudy during the period.
- Mainly dry weather is likely over the State.

### **Advisories**

- As there was no rainfall in the State during last week and mainly dry weather is likely over the State for the next three days, apply irrigation to toria, pea and potato.
- Undertake intercultural operations in potato and in orchards to keep the field weed free.
- Undertake weeding to conserve soil moisture in toria / pea.
- Undertake harvesting of mature crops of rice and fingermillet.

## Jammu & Kashmir

- Mainly dry weather is likely over the State.
- Weather remained mainly dry over J&K divisions.

## **Advisories**

- Apply irrigation to vegetable and fruit crops in Kashmir division and to vegetables, toria and fruit crops in Jammu division as dry weather prevailed during last week and likely to prevail over the State for the next three days.
- Stop irrigation 10-15 days before harvest of rice in Jammu division. Start harvesting the matured crop on bright sunny days.
- Prevailing weather conditions may be favourable for the mild infestation of aphids in toria crop in Jammu division. If the pest population crosses ETL, spray the crop with Chloropyriphos 20EC @ 0.05% or Monocrotophos 36 EC @ 0.04%.
- Continue transplanting of cauliflower and knol khol with seed rate of 500g and 250g respectively in Jammu division and sowing of onion in Kashmir division.
- Continue land preparation and sowing of wheat in Kashmir division. Adopt 100 kg / ha seeds for sowing. Apply 40 kg N, 60 kg P<sub>2</sub>O<sub>5</sub> and 40 kg K<sub>2</sub>O as basal.
- Sowing of normal sown wheat varieties (HD-2329, CPAN-3004, Raj-3077, PBW-343, RSP-303, WH-542 & PBW-154) under irrigated condition and PBW-396, RSP-81, IWP-72 & PBW-175 under rainfed condition with seed rate 100 kg/ha can be done during this period in Jammu division.
- Prepare land for sowing of gobi sarson crop (varieties: GSL-I, DGS-I) and gram (var: C-235, K-468, Gourav and PBG-I) crop in Jammu division in irrigated as well as rainfed areas.
- Continue harvesting of matured fruit crops and maize in Jammu division and pea, lentil, chickpea etc. in Kashmir division in bright sunny days.

### Delhi

- Whether remained mainly dry.
- Mainly dry weather is likely over the State.

- As there was no rainfall in the State during last few weeks and mainly dry weather is likely over the State for the next three days, apply irrigation to vegetables.
- Prepare land and undertake transplanting of 5 6 weeks old seedlings of cauliflower, tomato and brinjal in the main field.
- Continue sowing varieties like Japani White and Rashmi for raddish, Pusa keshar and Pusa Desi for carrot and Pusa Kanchan, PTWG and Golden Ball for turnip. Treat the seeds with captan or thiram or dithane M-45 @ 2 g / kg of seeds.
- Sow potato with seed weight ranging from 25-30 gm. Select varieties from Kufri Badshah, Kufri Bahar and Kufri Chander Mukhi for sowing.

- Prepare field and undertake sowing of mustard. Use varieties like Pusa bold, Pusa Barani, T-59 (Varuna) and Pusa Kalyani etc.
- Undertake sowing of barseem varieties like Pusa Joint Tetraptoid or maskavi. Treat the seeds with Rhizobium culture before sowing. Barley and Mustard seeds may be mixed with Barseem for good first cutting.
- Prepare field and undertake sowing of wheat. Use varieties like HD 2329, HD 2009, WL 74, HD 3438, CPAN-2004, PBW-215 etc. for sowing.
- Prepare field and undertake sowing of gram. Use varieties like P-209, Pusa 408, Gaurav C-235 and K-851 (Kabuli Chana) etc. for sowing.
- Prepare field and undertake sowing of barley. It is recommended to sow varieties like Jyoti, BG-25, DL-70 and Ratna etc. Adopt seed rate of 75 100 kg / ha.

## Southern Region (AP, Tamilnadu, Karnataka and Kerala)

## Kerala

- Northeast monsoon was weak over Kerala during 12<sup>th</sup> to 14<sup>th</sup>. Rain occurred at isolated places on 12<sup>th</sup>, 13<sup>th</sup> & 14<sup>th</sup> November.
- Rain/thundershowers are likely at isolated places over the State.

### **Advisories**

- As there was no significant rainfall in all the districts over the State except in Thiruvananthapuram district during last week, apply irrigation to plantation crops viz., coconut, arecanut, rubber and banana. Postpone irrigation in Thiruvananthapuram as there was excess rainfall during last week.
- Continue intercultural operations, application of fertilizers and pesticides in plantation crops.
- Attack of rhinoceros beetle, leaf rot, stem bleeding and Eriophid mite is reported in coconut. Fill the leaf axils with Sevidol 8G @ 25 g mixed with 200 g fine sand to control rhinoceros beelte. As a prophylactic measure spray crowns and leaves with 1% Bordeaux mixture or 0.5% copper oxychloride formulation or 0.4% Mancozeb. In the leaf rot affected plants, remove the rotten parts from the spear and the two adjacent leaves and pour 300 ml fungicidal solution at the base of the spear which can be prepared by mixing Hexaconazole @ 5 EC 2 ml or Mancozeb @ 3 gm in 300 ml of water. To control stem bleeding, chisel out completely the affected tissues and paint the wound with Tridemorph @ 5%.Apply coal tar after 1-2 days. Root feed with Tridemorph 5% to prevent further spread of lesions. Undertake prophylactic spraying with 2% neem oil + garlic emulsion in the crown and bunches, 2nd 7th bunches from top avoiding unpollinated inflorescence to minimize Eriophid mite incidence.
- Attack of *Phytophthora* foot rot is reported in pepper. Spray and drench with Copper oxy chloride @ 0.2%.
- Attack of pink disease is reported in rubber. Clean the affected portion and apply Boardeaux paste @ 1%.
- In early transplanted *mundakan* rice, attack of blast and bacterial leaf blight diseases is reported. Apply *Pseudomonas* culture @ 25 kg/ha mixed with 50 kg of cow dung to control blast & bacterial blight disease. Application of *Pseudomonas* culture may not be done along with chemical fertilizers and plant protection chemicals.

### Tamilnadu

- Rainfall occurred at one or two places over Tamilnadu on 12<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> November.
- Isolated rain/thundershowers are likely over south Tamil Nadu and mainly dry weather is likely over remaining part of the State.

### **Advisories**

• As there was no significant rainfall during last week and rain/thunder showers are likely to occur at isolated places over south Tamil Nadu for the next three days, apply irrigation to sugarcane and early sown maize, groundnut, black gram, green gram and pulses.

- Monitor maize for stem borer and aphids and if the pests population crosses ETL, spray Carbaryl 50% WP @ 400 g/acre to control the pest.
- Continue sowing of rainfed groundnut, black gram, green gram and red gram. Use 112 kg pods/ha for groundnut and 20 kg/ha for pulse crops.
- Continue sowing rainfed millet crops like jowar, bajra and samai. Undertake seed treatment with Azospirillum before sowing.
- Continue picking matured cotton bolls on bright sunny days. Picking may be done at early morning hours to maintain quality of kapas.
- Undertake land preparation and sowing of coriander in the main field in southern region. Adopt 5 kg seeds / ac in the spacing of 20 x 15 cm under irrigated condition. If rainfed crop, seed rate @ 10 kg/ac has to be broadcasted evenly. Apply Urea @ 9 kg/ac / super @ 100 kg/ac and potash @ 13 kg/ac as basal for both rainfed and irrigated condition.

## Karnataka

- Dry weather prevailed over the State from 12<sup>th</sup> to 14<sup>th</sup> October.
- Mainly dry weather is likely over the State.

## **Advisories**

- As there was no significant rainfall during last week and dry weather is likely to prevail over the state for the next three days, apply irrigation to summer sugarcane, *rabi* jowar, maize, cotton and sunflower.
- Moderate cold wave conditions prevailed over few parts of Interior Karnataka during last week. In order to prevent the crops from cold injury, apply irrigation to standing *rabi* crops.
- Undertake propping of sugarcane to prevent the crop from lodging.
- Continue harvesting matured *kharif* crops of maize and jowar and picking cotton on bright sunny days.
- Undertake intercultural operations and application of fertilizers in *rabi* crops like maize, jowar, sunflower and cotton.
- Monitor *rabi* sunflower for powdery mildew and undertake spraying of Wettable Sulphur @ 3 g/litre of water.

## **Andhra Pradesh**

- Cold wave condition prevailed in the district of Chittoor and Anantpur on 14<sup>th</sup> Nov.
- Mainly dry weather is likely over the State.

- As dry weather is likely to prevail for the next three days, apply irrigation to red gram and chillies.
- Continue harvesting of rice and groundnut on bright sunny days.
- Continue picking of cotton on bright sunny days. Picking may be undertaken after current spells of rain in south Coastal Andhra Pradesh and Rayalaseema.
- Monitor red gram for Helicoverpa and spray NSKE @ 5% to control egg and early instar larvae.
- The incidence of thrips, dieback, Cercospora leaf spot, Choanephora blight and powdery mildew is noticed in chillies. To control thrips, spray Fipronil @ 2.0 ml per litre of water. To control dieback, spray Captan @ 1.5 g per litre of water. To control Cercospora leaf spot, spray Mancozeb @ 2.5 g or Carbendazim @ 1 g per litre of water. To control Choanephora blight, spray Plantamycin or Poustamycin @ 0.2g or Streptomycin @ 0.1g + Copper oxychloride @ 3g per litre of water 2-3 times at 15 days interval. To control powdery mildew, spray Wettable Sulphur @ 3.0 g per litre of water.

• The deficiency of Zinc and Boron is noticed in Chilli. The prevailing low temperature further hastens the deficiency. To correct zinc deficiency, spray ZnSo4 @ 2g per litre of water. To correct boron deficiency, spray Borax @ 1.5 g per litre of water.

# Eastern Region (Assam, Arunachal Pradesh, Bihar, Jharkhand, Sikkim, West Bengal)

## **Assam**

- Isolated very light rain occurred on 14<sup>th</sup> over the State and mainly dry weather prevailed on 12<sup>th</sup> & 13<sup>th</sup> November.
- Rain/thundershowers are likely at many places over the State during next 48 hours and decrease thereafter.

- As rain/thundershowers are likely at many places over the State during next 48 hours, postpone intercultural operation and irrigation to the crops.
- Maintain 3 5 cm water in Sali rice field.
- Drain out water from the field 10-15 days before harvesting of Sali rice. Harvest already matured crops on bright sunny days.
- Continue harvesting of matured crops of sugarcane. Red rod infested sugarcane may be harvested early and the field should be newly planted. Ratooning of infested plant should be discarded.
- Incidence of hispa and stem borer was noticed in Sali rice in few localities. Monitor the infestation of hispa and stem borer. If one adult is noticed per hill, insecticides like Chloropyriphos 20 E.C. @ 2 ml per litre of water or Monocrotophos 40 EC @ 1.5 ml per litre of water is to be applied. For management of yellow stem borer Trichogramma Japonicum @ 50,000 per hectare in six releases are to be used.
- In black gram and green gram, monitor the crops for aphids, jassids and flea beetle attack. Undertake spraying of Malathion 50 EC @ 2 ml/litre of water, if required. As soon as leaf spot disease appears Blitox or Fytolan @ 1.5 gm per litre of water should be sprayed at an interval of 7-10 days. Alternatively, Bavistin @ 1gm per litre of water should be sprayed at an interval of 12-15 days.
- Apply chemicals after current spells of rain.
- Prepare land for early varieties of winter vegetables such as spinach, reddish & corrinder etc.
  and seeds of hybrid varieties of tomato, brinjal, capsicum, cauliflower and cabbage etc. may
  be collected from reputed sources and should be sown in the seed bed for raising seedling for
  planting in the main fields.
- Completely flood damaged area and area which could not be covered due to non availability of Sali rice seedlings may be selected for cultivation of different rabi crops such as mustard, rapeseeds, pea, lentil, wheat etc. and land preparation may be started .Sowing may be continued till 15th of November. For mustard and rape seed apply Urea @ 20 kg and SSP @ 30 kg per bigha at the time of land preparation and use seeds @ 1.5 kg per bigha for sowing. For pea apply Urea @ 6 kg, SSP @ 4 kg per bigha at the time of land preparation and use seeds @ 7 kg per bigha for sowing.
- For cultivation potato apply Urea @ 19 kg, SSP @ 45 kg and MOP @ 12kg per bigha at the time of land preparation and use tuber (2.5 cm in diameter, 25 gm by weight) @ 3 quintal per bigha for planting at distance of 15 cm.
- Prepare land and start sowing of wheat. Wheat may be sown from 1st week of November to 1st week of December. Select varieties from Sonalika, PBW, UP-262etc. Adopt seed rate of 16 kg/bigha.
- Perform sowing of winter vegetables, wheat and rabi crops after current spells of rain.

## **Arunachal Pradesh**

- Rain occurred at a few places on 12<sup>th</sup> and weather remained mainly dry on 13<sup>th</sup> & 14<sup>th</sup> November.
- Rain/thundershowers are likely at many places over the State during next 48 hours and decrease thereafter.

## **Advisories**

- As rain/thundershowers are likely at many places over the State during next 48 hours, postpone irrigation to wheat and mustard.
- Maintain 3-5 cm of water in wet seeded rice field.
- Undertake surveillance of rodent attack in *jhum* rice and millet.
- Continue sowing of potato after current spells of rain.
- Continue transplanting of *rabi* vegetables like cauliflower, chinese cabbage, carrot, knol-khol, lettuce, methi, palak, peas, raddish, tomato, turnip etc. after current spells of rain.
- Prepare field and undertake sowing of pea and *rabi* maize after current spells of rain.
- Undertake harvesting of ginger and millet on bright sunny days.

## Bihar

- Weather was mainly dry.
- Mainly dry weather is likely over the State.

### **Advisories**

- As there was no rainfall in the State during last few weeks and mainly dry weather is likely over the State for the next three days, apply irrigation to the standing crops.
- Continue sowing of raddish, early cauliflower, chillies, fodder maize, pea, gram, lentil and & tomato.
- Continue land preparation and planting of potato. Select among Kufri Ashoka or Kufri Chandramukhi or Rajendra, Aloo-3.
- Start harvesting of the matured crops of rice.
- Continue field preparation and sowing of rai and linseed. Use certified seed of rai variety Kranti, varuna, pusa bod and linseed variety 397, shubhra, garima and sweta.
- Start field preparation and sowing of wheat in unirrigated areas. Select varieties like C-306, K-8027, RW 3016, HD 1493, HD 2888. Use seed rate @ 125 Kg/ha.

## **Jharkhand**

- Weather remained mainly dry.
- Mainly dry weather is likely over the State.

- Apply irrigation to early sown vegetables as there was no significant rainfall during last week and mainly dry weather is likely over the State for the next three days.
- Start harvesting of matured crops of rice.
- Complete harvesting of upland crops like maize, groundnut, urd and moong. After harvest, undertake sowing of rabi crops like gram, sarson, rai, toria, pea, masoor and linseed wherever facilities for 2-3 irrigations are available.
- Continue land preparation and sowing of cabbage, cauliflower, chilli, potato, tomato, etc, Select among Altimous, Kufri Chandramukhi, Kufri Ashok, Kufri Badshah to plant potato in the main field.
- Start field preparation and sowing of wheat. Sow varieties like HD-2733, HD 2402, HUW 468, PBW 343, NW- 1012, K8804, K9107 etc.in irrigated conditions and C 306, K 8027, HDR 77, K8962 for rainfed conditions.

Maintain 3 – 5 cm water in the field of aman rice wherever crops are at grain formation stage. Continue harvesting of already matured crops on bright sunny days over Sub Himalayan West Bengal (SHWB). Drain out water from the aman rice field 10 – 15 days before harvesting. Postpone the same in the districts of Gangetic West Bengal under prevailing weather condition.

## Sikkim

- Sky remained generally cloudy during the period.
- Rain/thundershowers are likely to occur at a few places over the State during next 48 hours and decrease there after.

### **Advisories**

- As there was no significant rainfall during last week and rain/thundershowers are likely to occur at a few places over the State during next 48 hours, apply irrigation to rabi vegetable crops like cabbage, cauliflower, carrot and beet root crops.
- Maintain water level of 3-4 cm in the rice field.
- Continue harvesting of large cardamom, ginger and orange.
- Monitor orange for fruit flies. Prepare baits made of Sevin and keep once in every 10-15 days till harvesting.
- Undertake intercultural operations and application of fertilizers in rabi vegetable crops like cabbage, cauliflower, carrot and beet root to keep the field weed free.
- Continue land preparation and sowing of mustard and wheat in the field using residual moisture. Use certified seeds for sowing.

## West Bengal

- Weather was mainly dry over Sub Himalayan West Bengal and Gangetic West Bengal during this period.
- Rain / thundershowers are likely at most places over costal districts of West Bengal and at many places over interior Gangetic West Bengal during next 48 hours and decrease thereafter. Mainly dry weather is likely over the rest region outside Sub-Himalayan West Bengal where rain / thundershowers are likely at a few places during next 48 hours and decrease thereafter.

## Warning:

**Cyclone Warning For West Bengal coast:** Heavy to very heavy falls at a few places and isolated extremely heavy falls (25 cm or more) likely over coastal districts of West Bengal during next 48 hours causing floods in low lying areas. Gale wind speed reaching 90-120 kmph is likely to commence by noon of today, the 15<sup>th</sup> November 2007 and as the system approaches towards the coast, the gale wind speed reaching 180-200 kmph likely along and off the West Bengal coast.

- As rain / thundershowers are likely at most places over costal districts of West Bengal and at many places over the districts of interior Gangetic West Bengal with the possibility of heavy to very heavy falls at a few places and extremely heavy falls (25 cm or more) at isolated places during next 48 hours, postpone irrigation to the crops in these districts and arrange for draining out excess water from the field. Also postpone intercultural operation in the standing crops and sowing of rabi crops under prevailing weather condition.
- As there was no significant rainfall during last week over Sub Himalayan West Bengal (SHWB) and rain/thundershowers are likely to occur only at a few places over this region for next three days, apply irrigation to sugarcane and arhar and already sown rabi crops in these districts.
- Prepare land and continue sowing of mustard, rapeseed, gram, lentil and rabi arhar and planting of potato in the districts of Sub Himalayan West Bengal (SHWB). Postpone the same in Gangetic West Bengal.

## Central Region (Gujarat, Chhattisgarh, Maharashtra, MP & Orissa)

## Gujarat

• Mainly dry weather is likely to prevail over the State.

#### Advisories

- As there was no significant rain during last few weeks over the State and mainly dry weather is likely to prevail over the State for next three days, apply irrigation to sugarcane, kharif cotton, castor and mustard.
- In some places cotton crop is infested with mealy bug. Monitor the crop for mealy bug and if damage exceeds ETL, to control the pest spray Methyl dimeton 25 EC @ 10 ml or Phosphamidon 85 EC @ 5 ml or Dimethoate 30 EC @ 10 ml in 10 liters of water.
- Undertake sowing of mustard variety G-Mustard 1-2-3 & Varuna with basal fertilizer doze of 25kg. Nitrigen & 50 kg Phosphorous per hactare. Wherever deficiency of sulphur in soil apply 40 kg sulphur as a basal doze.
- Prepare land for sowing of wheat by one harrowing and ploughing with application of FYM
   @ 10 15 MT before ploughing. Apply 60 kg N and 60 kg P2O5 as basal dose at the time of sowing for irrigated crops and 20 kg N / ha for rainfed crops. Select varieties from Lok-1, GW-190, GW-496, 503, 273, 322, Raj 1555 for timely sown irrigated crops, Lok-1 and GW-173 for late sown irrigated crops and GW-1 and A-206 for rainfed crops.

## Chhattisgarh

- Weather was mainly dry in all divisions of the State.
- Mainly dry weather is likely to occur over the State.

#### **Advisories**

- As there was no rainfall during last week in the State and mainly dry weather to occur over the State for next three days, apply irrigation to sugarcane, toria and vegetables.
- Drain out water from *kharif* rice field 10 15 days before harvesting. Harvest the already matured crops on bright sunny days. Sowing of gram, safflower, green gram, linseed and lathyrus may be undertaken before harvesting of rice in wet field as utera crop.
- Prepare land for sowing of rapeseed and niger. Sow the seeds in lines keeping 30 cm row-to-row spacing. Apply 40:30:20 kg of Nitrogen, Phosphate and Potash per hectare in the field.
- Transplanting of seedlings of tomato, brinjal, chilli, cauliflower etc. in the main fields may be continued in the afternoon to avoid the mortality of seedlings.

## Maharashtra

- Mainly dry weather prevailed all over the State.
- Mainly dry weather is likely over the State.

- As there was no significant rain in most of the districts of the State during last few weeks & mainly dry weather is likely over the State during next three days, apply irrigation to sugarcane (Pre-seasonal), sugarcane (suru), kharif cotton, kharif tur, rabi jowar and safflower.
- Maintain 3 5 cm water in the rice field wherever the crops in grain formation stage. Water
  may be drained out 8 to 10 days before the harvesting of matured crop. Continue harvesting of
  matured crops on bright sunny days.
- Apply 50 kg Nitrogen/ha to black soil, 40 kg/ha to medium & 25 kg Nitrogen/ha to low fertile soil after 25 to 30 days from sowing of rabi jowar.
- Apply 35 kg Nitrogen/ha after 30 days from sowing of rabi safflower at the time of first irrigation.
- Mild incidence of white woolly aphids in Kolhapur division in Sugarcane (pre-seasonal) & sugarcane (Suru), boll warm in Nagpur division in kharif cotton and irrigated cotton and pod borer in Nashik, Pune, Aurangabad, Latur and Amravati division in kharif tur is reported.

- Monitor the Sugarcane (pre-seasonal) & sugarcane (Suru) for White Woolly Aphids & if exceeds economic threshold level, for effective control spray 500 ml Endosulphan 35%+ Metasystox 1000 ml & 500 ml Sticker or 500 gm detergent powder / ha in 500 liters of water. For the biological control of White Woolly Aphids, release 25000 larvae of Chrysoperla carnea or Dipha aphidivora / ha as predator after 15 days from the above dose.
- For the control of boll warm in cotton adopt integrated pests management method. Monitor the crop for same & if exceeds economic threshold level, spray 36 % WSC Monocrotophos @ 850 ml or 25 % WSC Quinolphos @ 1000 ml /ha in 500 liters water.
- Monitor the crop for pod borer in tur & if exceeds economic threshold level, first spray 250 diseased larvae of Nuclear poly hydrosis virus followed by 35 EC Endosulphan 1000 ml/ha in 500 liters water 3 times by 15 days interval.
- This is the proper time for sowing of rabi Jowar, gram and safflower and planting of potato and onion. Select varieties from Selection-3 for low fertile soil, Maldandi, Mauli, Phule chitra, SPV-86 for Madhya Maharashtra, SPV-669, AKSV-13-R for Vidarbha & PKV-809, SPV-1411 for Marathwada for medium & black soil for rabi jowar and Girna for Khandesh, Sharda for Marathwada, Bhima, JLSF-414 for Madhya Maharashtra & AKS-207 for Vidarbha for safflower. For planting of potato select a variety from Kufri Sinduri, Kufri Lavkar & Kufri Jyoti. Select varieties from Vikas, Phule G-12, Vishwas, Vijay, Vishal & Virat for gram and select varieties from HD-2189, HD-2278, DWR162, MACS-2489, Trimbak, Godavari, Tapovan & Vimal for irrigated wheat.

## **Madhya Pradesh**

- Dry weather prevailed over the state.
- Mainly dry weather is likely over the State.

#### **Advisories**

- As dry weather prevailed during last week in most of the districts and likely to prevail for the next three days, apply irrigation to sugarcane.
- Undertake intercultural operation in sugarcane to keep the field weed free.
- Continue picking/harvesting cotton and rice on bright sunny days.
- Undertake sowing of *rabi* crops like wheat, linseed, lentil, gram and mustard by utilizing residual moisture. Undertake seed treatment with Thiram @ 1.5 g/kg seeds followed by biofertilizers before sowing.
- Undertake nursery sowing of cabbage, cauliflower and onion. If seedlings are at proper age, transplanting in the main field may be started.
- Undertake sowing of coriander, spinach and methi in the main field.

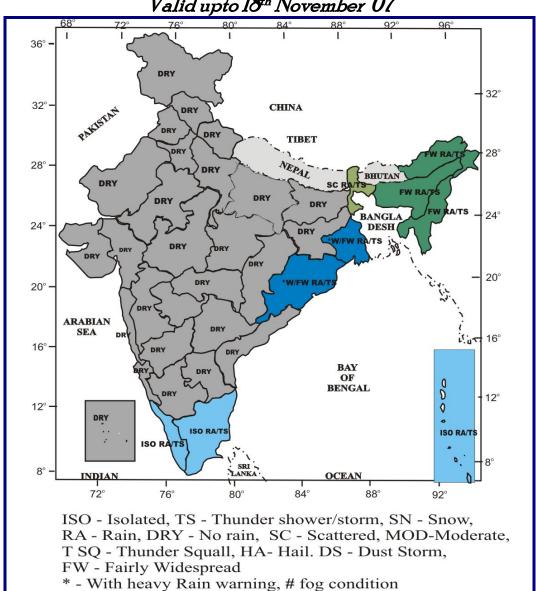
#### Orissa

- Weather has been dry over the State.
- Rain / thundershowers are likely to occur over the State during next 48 hours and decrease thereafter.

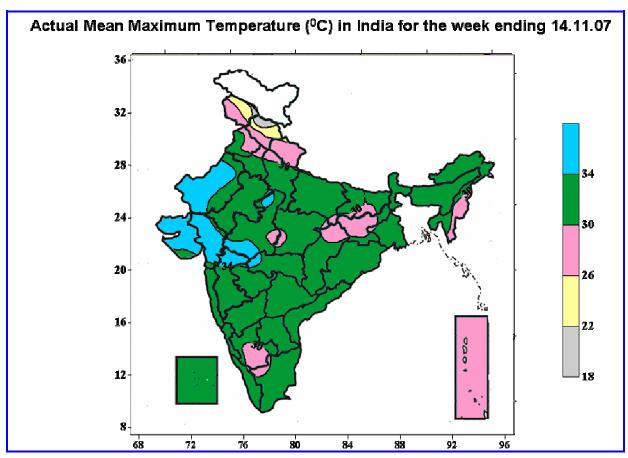
- As there was no rainfall over the State during last week and rain/thundershowers are likely at a few places during next 48 hours and decrease thereafter in interior Orissa, apply irrigation to the standing crops in interior Orissa. As rain/thundershowers are likely at most places over Coastal districts of North Orissa and at many places over South Coastal Orissa during next 48 hours and decrease there after, postpone irrigation in coastal districts of Orissa.
- Arrange for extensive drainage facilities in coastal Orissa to avoid waterlogging due to heavy rainfall and flooding in lowlying areas. Protect the crops from gale winds.
- Monitor rice for bacterial leaf blight, neck blast and cutworm. To manage bacterial leaf blight spray Streptocyclin @ 1gm/ 10 litre of water along with 20 gm of Copper Oxychloride, to manage neck blast spray Adinophos @ ml/litre or Tricyclazole @ 6gm/litre of water after

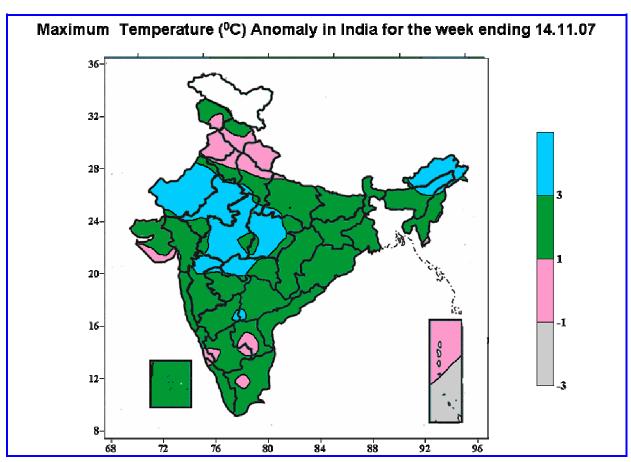
- current spells of rain and to manage cut worm spray Chloropyriphos @2ml per litre of water after current spells of rain for the crop in grain formation stage after current spells of rain.
- Undertake sowing of moong and urd after current spells of rain. Select P.D.M.-54, PDM-11, TARM-1 varieties in moong, and T-9, PU-19, PU-30 in urd. Apply 8 Kg N, 16Kg P & 8 Kg K/ha as basal after current spells of rain.

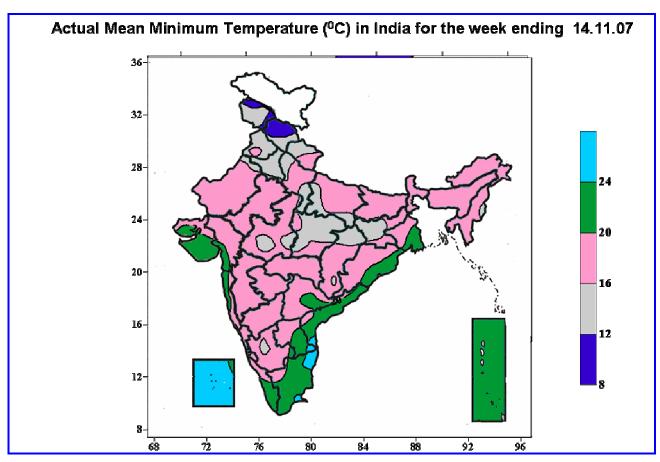


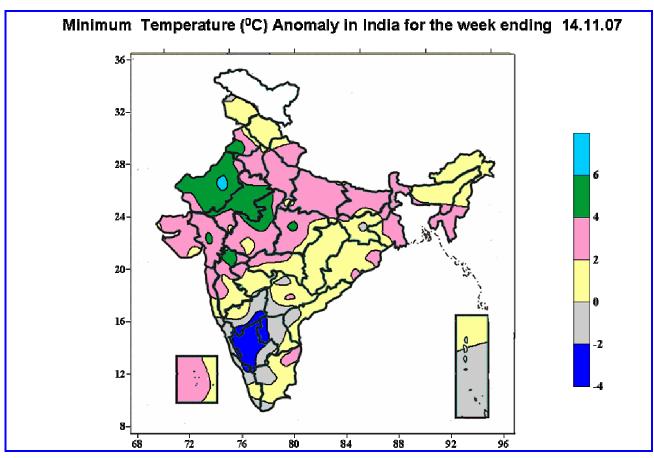


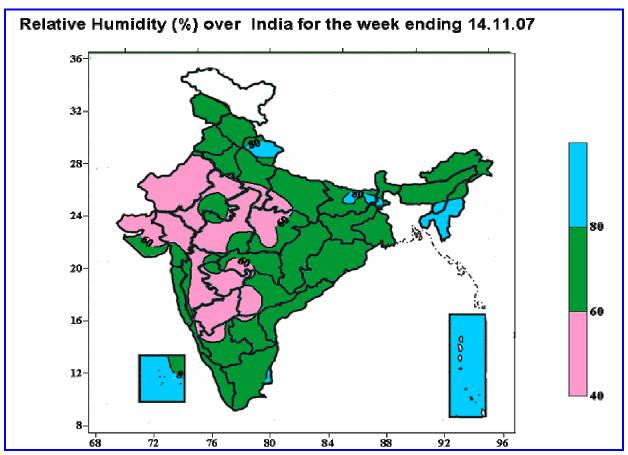
# Contour maps for the week ending 14th November, 2007

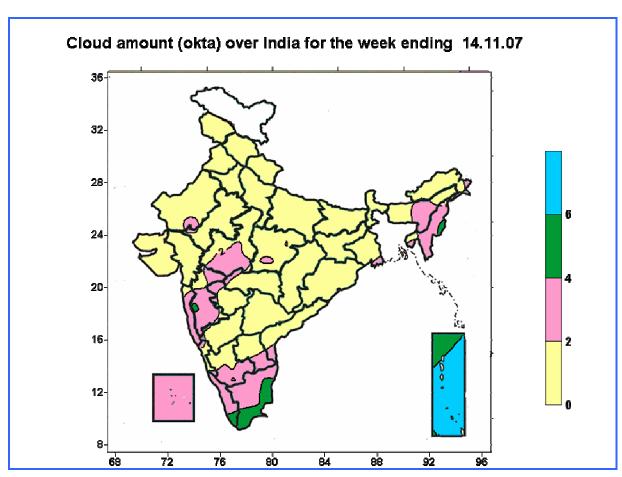


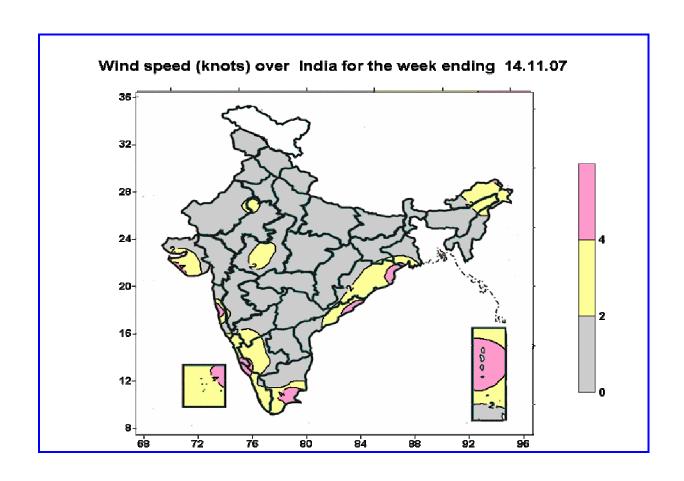














Under the prevailing weather conditions, there is no chance of locust infestation in Rajasthan and the adjoining areas during this week.

# CROP-STATE-STAGE

Delhi

Vegetables	Early sown vegetables	Mustard	Berseem	Wheat, Gram, Barley	
Sowing/Transplanting	Vegetative	Sowing	Sowing	Sowing	
Haryana					
Sugarcane	Horticultural crops	Cotton	Paddy	Kharif Groundnut	
Vegetative	Vegetative	Picking	Grain harvesting	Pod maturity	
Rabi Pulses	Wheat				
Sowing	Sowing				

**Himachal Pradesh** 

Vegetables (Ladies finger/ Cabbage, Cauliflower)	Potato	Apple	Toria	Wheat / Barley / Gram / Oil seeds
Vegetative/ head formation Ladies finger Flowering/Fruiting	Maturity / harvesting	Harvesting	Vegetative	Land preparation & sowing Early sown crops - germination

## Jammu & Kashmir

		Jammu & Kashmir		
Vegetable crops	Rice	Pulses / wheat / brown sarsun	Mustard, gobe sarson	
Sowing / transplanting	Harvesting- Jammu div.	Land preparation for sowing in Kashmir div.	Land preparation for sowing in Jammu div.	
		Punjab		
Sugarcane	Horticultural crop	Rabi pulses	Cotton	Cabbage / garlic / pe / potato
Vegetative	Vegetative	Sowing	Picking	Sowing
Kharif Groundnut	Wheat	Autumn sugarcane		
Pod maturity	Sowing	Germination / seedling		
		Rajasthan		
Wheat	Cotton	Rabi crops(Mustard, taramira, gram)	Early sown rabi crops	Potato
Sowing	Harvesting/Picking	Sowing	Germination	Planting
		Uttar Pradesh		
Cucanaana	VI. wif Vocatables		Rice	Towis
Sugarcane	Kharif Vegetables Flowering / fruiting /	Mango	Rice	Toria
Cane maturity	maturity	Vegetative	Maturity / harvesting	Early vegetative
Wheat	Winter vegetables	Rabi pulses	Rai, mustard	
Field preparation & sowing	Vegetative / flowering	Seedling	Seedling	
		Uttarakhand		
Pea	Toria	Sugarcane	Potato	Kharif Rice
Vegetative	Flowering / grain formation	Maturity	Seedling	Harvesting
FingerMillet/	Mango/Litchi			
Amranthus  Maturity	Early vegetative			
Waturity	Larry vegetative	Assam		
		Assam		Black Gram & Gree
Winter vegetables	Sugarcane	Arhar	Sali rice	Gram
Land preparation & sowing Early sown – early vegetative	Harvesting	Flowering / pod formation	Grain formation / maturity / harvesting	Pod formation
Rabi crops	Wheat	Horticultural plants		
Land preparation & sowing Early sown – early vegetative	Land preparation & sowing	Planting		
		Arunachal Pradesh		
WRC Rice	Ginger	Millet	Jhum Paddy	Potato
Grain maturity	Rhizome maturity	Harvesting	Grain maturity	Germination
Rabi Vegetables	Wheat / Mustard	Pea / rabi maize		
Transplanting Early sown – early vegetative	Early vegetative	Germination		
<i>6</i> · · · · · · · ·	•	Bihar	ı	ı
Vegetables & fruit crops	Maize fodder	Arhar	Sugarcane	Kharif rice
crops	Maize fodder  Early vegetative			-
_		Arhar Vegetative	Sugarcane Vegetative	Kharif rice  Maturity
crops Sowing			_	-

gnar mana					
Kharif rice	Potato	Vegetables (Tomato, Brinjal, Bhendi)	Upland crops (Maize, arhar, groundnut, soybean, urad, rice and ragi)		
Grain maturity	Planting	Sowing Early sown – Early vegetative	Harvesting		

Pea, gram	Potato		Wheat	
Sowing	Sowing Planting Sowing		Sowing	
		Sikkim	1	T
Orange	Vegetables	Large Cardamom	Ginger	Rice
Maturity/ harvesting	Early vegetative / vegetative	Capsule maturity/ harvesting	Harvesting	Grain formation
		West Bengal	1	T
Sugarcane	Groundnut	Arhar	Aman rice	Mustard / Rapeseed
Cane development	Pod maturity	Flowering / pod formation	Grain formation / maturity / harvesting	Land preparation / sowing
Rabi arhar	Potato			
Sowing	Planting	Chattisgarh		
G	D 1 T 1 Y		Tomato, Brinjal,	
Sugarcane	Rapeseed, Toria, Niger	Kharif Rice	Chilli	
Vegetative	Land preparation & sowing Toria - vegetative	Grain maturity / harvesting	Vegetative / flowering	
		Gujarat		
Sugarcane	Mustard / wheat	Castor	Kharif Rice	Kharif Cotton
Cane development / early maturity	Land preparation & Sowing	Spike formation	Milking / dough / maturity	Boll formation/ boll maturity / picking
	Early sown mustard Germination / early vegetative			
		Maharashtra		
Sugarcane Preseasonal (Madhya Maharashtra, Marathwada & Vidarbha)	Sugarcane (Suru) (Madhya Mahrashtra, Marthwada and Vidarbha)	Irrigated cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Rice (Konkan)	Kharif Rice (Madhya Maharashtra, Marathwada & Vidarbha)
Active growth / elongation	Active growth / elongation	Boll maturity / picking	Grain maturity / harvesting	Grain formation / grain maturity
Kharif Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Cotton (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif Tur (Madhya Maharashtra, Marathwada & Vidarbh	Rabi Jowar
Grain maturity / harvesting	Pod maturity / harvesting	Boll formation /	Flowering / pod	Sowing
Rabi potato	Rabi onion	maturity <b>Gram</b>	formation Wheat	Early sown jowar
Planting Early planted - sprouting	Planting	Planting Early sown - germination	Sowing	Germination / early vegetative
Rabi safflower				
Sowing. Early sown – germination / early vegetative				
		Madhya Pradesh		
Sugarcane	Kharif rice	Rabi crops (wheat, linseed, lentil, gram, mustard)	Rabi vegetables (cabbage, cauliflower, onion)	Cotton
Grand growth	Harvesting	Sowing	Nursery sowing	Harvesting
		Orissa		
Kharif vegetables	Kharif rice	Sugarcane	Arhar	
Vegetative / fruiting	Grain formation / Maturity	Vegetative	Vegetative / Flowering	
		Andhra Pradesh		
Kharif Rice	Kharif Cotton	Kharif Groundnut	Rabi red gram / chillies	
Harvesting	Picking	Harvesting	Vegetative	

	Karnataka				
Sugarcane (Ratoon crop)	Kharif Sunflower	Groundnut	Kharif maize & Jowar	Cotton	
Grand growth	Maturity / harvesting	Pod development / maturity	Maturity / harvesting	Maturity / harvesting	
Rabi Jowar/Maize/Cotton/ Sunflower					
Early vegetative / vegetative					
		Kerala			
Rubber	Mundakkan Rice				
Tapping	Flowering				
		Tamil Nadu			
Rice (Samba)	Sugarcane (Early, Mid season)	Maize	Groundnut/Black gram/Green gram/Red gram	Cotton	
Vegetative	Grand growth	Grain formation	Sowing	Picking	
Jowar/Bajra/Samai	Special season sugarcane	Early sown jowar / bajra / samai	Early sown Groundnut/Black gram/Green gram/Red gram	Coriander	
Sowing	Early vegetative	Early vegetative	Early vegetative	Sowing	