

National Agromet Advisory Service Bulletin

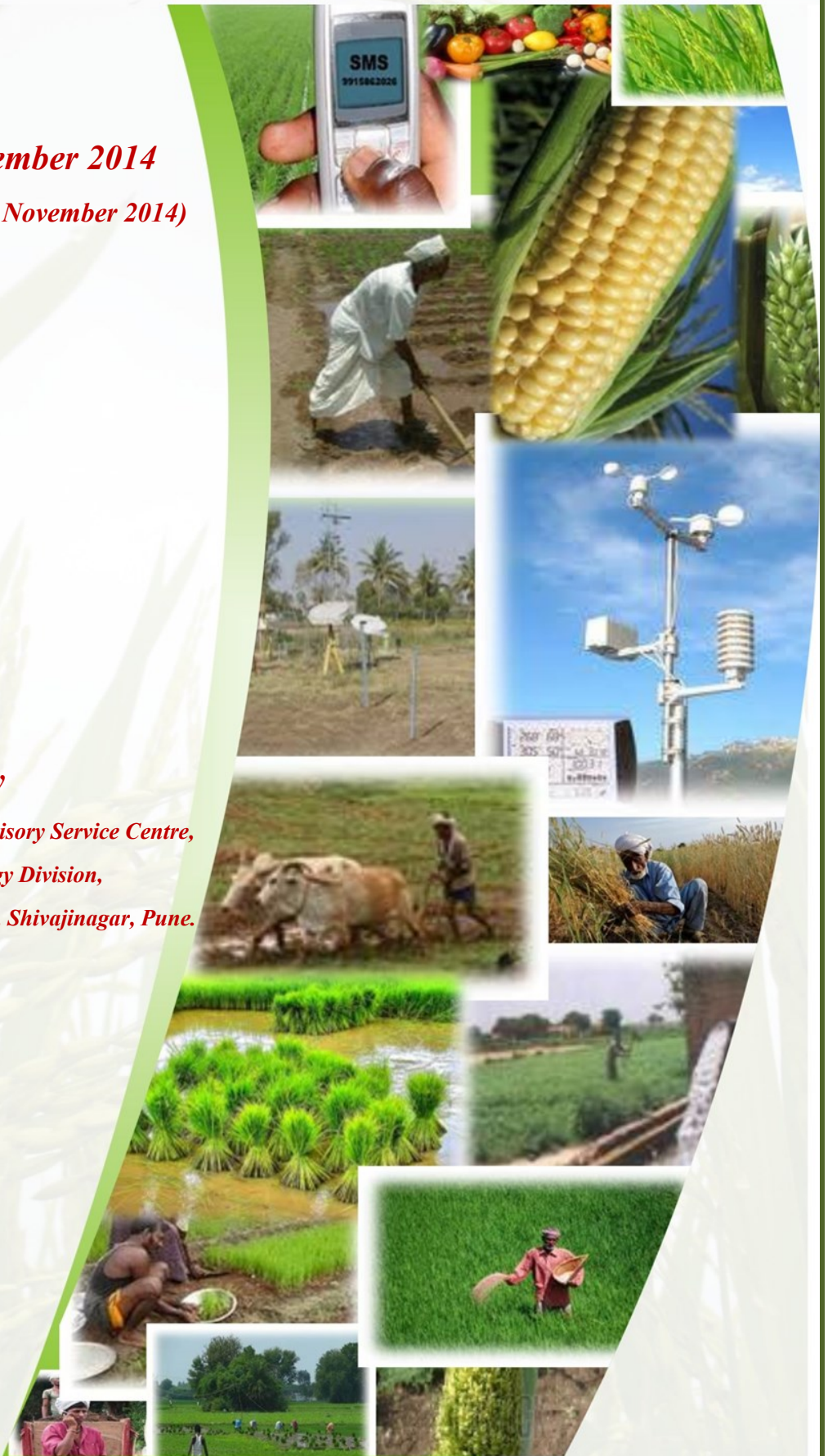
Tuesday 3rd November 2014

(For the period 3rd to 7th November 2014)



Issued by

**National Agrometeorological Advisory Service Centre,
Agricultural Meteorology Division,
India Meteorological Department, Shivajinagar, Pune.**



Realised Weather on 3rd November 2014

Significant Weather observations: Thunderstorms have been observed at isolated places over South Interior Karnataka, Kerala and Tamilnadu between 0830 hours IST of yesterday to 0530 hours IST of today.

Rainfall: (From 0830 hours IST to 1730 hours IST of yesterday) Rain/thundershowers occurred at many places over Andaman & Nicobar Islands and Tamilnadu and at isolated places over Kerala. Weather remained dry over rest of the country. The amount of rainfall (1 cm or more) recorded at 1730 hours IST of yesterday were: Nedumbassery 3; Portblair and Tondi 2 each and Mayabander, Pamban, Kozhikode, Valprai, Numgambakkam & Karipur 1 each.

Temperature: Yesterday, maximum temperatures were below normal by 2-4°C at many places over Tamilnadu; at a few places over Jammu & Kashmir, Uttar Pradesh and Andaman & Nicobar Islands and at isolated places over Gangetic West Bengal, Saurashtra & Kutch and East Madhya Pradesh. They were above normal by 2-5° C at many places over Maharashtra and Assam & Meghalaya; at a few places over Gujarat state, Konkan & Goa, Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Manipur and Tripura and at isolated places over Uttarakhand, Andhra Pradesh and West Madhya Pradesh and near normal over rest of the country. Yesterday the lowest minimum temperature of 11.5°C was observed at Narnaul (Haryana).

Weather Forecast

Weather Forecast for next 3 days (upto 0830 hours IST of 6th November, 2014)

- Rain/thundershowers would occur at most places over Andaman & Nicobar Islands during the period.
- Rain/thundershowers would occur at many places over Kerala during the period.
- Rain/thundershowers would occur at many places over Lakshadweep during next 24 hours; over Tamil Nadu & Puducherry during next 48 hours and at a few places thereafter.
- Rain/thundershowers would occur at many places over Coastal Andhra Pradesh during next 24 hours and decrease thereafter.
- Rain/thundershowers would occur at a few places over Jammu & Kashmir on 3rd; at many places on 4th and at a few places thereafter.
- Rain/thundershowers would occur at isolated places over northeastern States and Coastal Karnataka during the period.
- Rain/thundershowers would occur at isolated places over Himachal Pradesh on 3rd; at a few places on 4th and at isolated places thereafter.
- Rain/thundershowers would occur at a few places over Rayalaseema on 3rd; at isolated places on 4th and dry thereafter.
- Dry weather would prevail over Punjab during next 24 hours and rain/thundershowers would occur at isolated places on 4th and dry weather would prevail thereafter.
- Rain/thundershowers would occur at isolated places over South Interior Karnataka during next 48 hours and dry weather would prevail thereafter.
- Dry weather would prevail over Uttarakhand and Sub-Himalayan West Bengal & Sikkim during next 24 hours and rain/thundershowers would occur at isolated places thereafter.
- Dry weather would prevail over Haryana & Delhi, Gangetic West Bengal, Odisha, Jharkhand, Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Gujarat State, Maharashtra, Telangana and North Interior Karnataka during the period.
- Minimum temperatures would fall by 2-4°C over many

Weather Warning during next 3 days

- **03 November (Day 1):** Heavy rainfall would occur at isolated places over south Coastal Andhra Pradesh, Tamilnadu & Puducherry, Kerala and Andaman & Nicobar Islands.
- **04 November (Day 2):** Heavy rainfall would occur at isolated places over Andaman & Nicobar Islands, Tamilnadu and Kerala.
- **05 November (Day 3):** Heavy rainfall would occur at isolated places over Andaman & Nicobar Islands, Tamilnadu and Kerala.

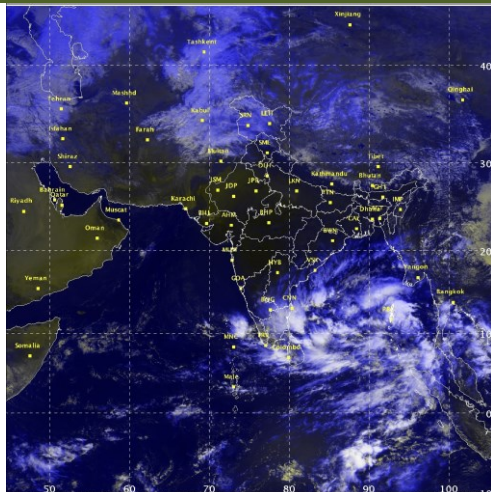
Weather Outlook for subsequent 4 days from 06th Nov 2014 to 10th Nov 2014

- Rain/thundershower would occur at a few places over extreme south Peninsular India and at many places over Andaman & Nicobar Islands.
- Rain/thundershower would occur at a few places over Western Himalayan region, Lakshadweep and at isolated places over northeastern states.
- Weather would be dry over rest of the country.

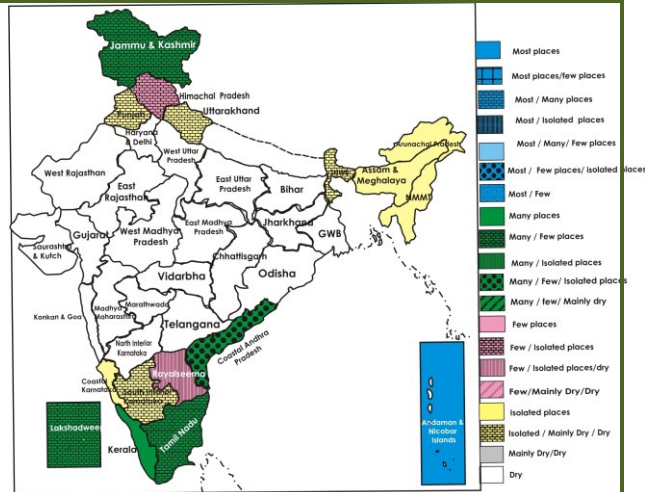
parts of Rajasthan and West Madhya Pradesh during next 24 hours and over Gujarat from tomorrow.

- No significant change in minimum temperatures over plains of northwest India during next 2 days.
- Shallow fog would occur at isolated places over Punjab, Haryana & Delhi and West Uttar Pradesh during next 3 days in the morning hours.

Satellite image dated, 03.11.2014, 0600 UTC



Weather Forecast Map (Valid upto 0830 hours of 6th November 2014)



Salient Advisories

- As rain/thundershowers would occur at many places over **Kerala** during the period and over **Tamilnadu** on 3rd & 4th November along with isolated heavy rainfall, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in standing crops. Provide adequate drainage in standing crop fields to remove excess water.
- Continue sowing of *rabi* groundnut and Bengal gram in Scarce Rainfall Zone of **Royalaseema**.
- Undertake sowing of chickpea and safflower crops under optimum residual moisture conditions and continue sowing of maize, groundnut and sunflower in South **Telangana** region.
- Continue sowing of wheat and sowing of *rabi* crops like sunflower, safflower, horse gram (PHG-9), sesame, cowpea, chickpea, and maize in the **North Dry Zone of Karnataka**.
- In North West Alluvial Plain Zone of **Bihar**, continue sowing of maize, pea, sunflower, garlic, lentil and planting of potato. Undertake sowing of rajma. Prepare nursery bed for onion crop.
- In Western Plateau Zone of **Jharkhand**, undertake sowing of gram, lentil and linseed. Also continue sowing of mustard and rainfed wheat. Continue planting of early potato and sowing of green peas. Undertake sowing of barley.
- Continue land preparation and sowing of mustard, green pea, gram and planting of potato in Gird Zone of **Madhya Pradesh**.
- Continue land preparation and sowing of *rabi* crops like toria, green pea, mustard, gram, linseed etc. and planting of early potato in North Hill Zone and **Chhattisgarh** Plain Zone.

Detailed Zonewise Agromet Advisories

SOUTH INDIA [TAMIL NADU, TELANGANA, ANDHRA PRADESH, KARNATAKA, KERALA]



Rice



Sugarcane



Cotton



Soybean

- **Realised Weather:** Thunderstorms have been observed at isolated places over South Interior Karnataka, Kerala and Tamilnadu between 0830 hours IST of yesterday to 0530 hours IST of today. Rain/thundershowers occurred at many places over Tamilnadu and at isolated places over Kerala. Weather remained dry over rest of the region. Yesterday, maximum temperatures were below normal by 2-4°C at many places over Tamilnadu. They were above normal by 2-5°C at isolated places over Andhra Pradesh and near normal over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at many places over Kerala during the period. Rain/thundershowers would occur at many places over Tamil Nadu & Puducherry during next 48 hours and at a few places thereafter. Rain/thundershowers would occur at many places over Coastal Andhra Pradesh during next 24 hours and decrease thereafter. Rain/thundershowers would occur at isolated places over Coastal Karnataka during the period. Rain/thundershowers would occur at a few places over Rayalaseema on 3rd; at isolated places on 4th and dry thereafter. Rain/thundershowers would occur at isolated places over South Interior Karnataka during next 48 hours and dry weather would prevail thereafter. Dry weather would prevail over Telangana and North Interior Karnataka during the period.
- **Weather Warning:** Heavy rainfall would occur at isolated places over Tamilnadu and Kerala during the period; over south Coastal Andhra Pradesh and Puducherry on 3rd November.
- **Weather Outlook:** Rain/thundershower would occur at a few places over extreme south Peninsular India. Weather would be dry over rest of the region.
- **Advisories:**
 - **Andhra Pradesh**
 - As rain/thundershowers would occur at many places over Coastal Andhra Pradesh on 3rd November along with isolated heavy rainfall over South Coastal Andhra Pradesh, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in standing crops. Provide adequate drainage in standing crop fields to remove excess water in South Coastal Andhra Pradesh.
 - Continue sowing of *rabi* groundnut and Bengal gram in Scarce Rainfall Zone of Rayalaseema.
 - Under waterlogged conditions, there is a possibility of occurrence of sheath blight in rice in Anantapuram district in Scarce Rainfall Zone of Rayalaseema. Spray Propiconazole @1 ml/lit of water control.
 - **Telangana:**
 - Undertake sowing of chickpea and safflower crops under optimum residual moisture conditions and continue sowing of maize, groundnut and sunflower in South Telangana region.
 - Due to heavy rains, nutrient deficiency symptoms are observed in tuber crops in Southern Telangana Zone. To control, undertake top dressing with 16 kg Nitrogen & 16 kg Potash fertilizer per acre.
 - **Karnataka:**
 - Continue sowing of wheat and sowing of *rabi* crops like sunflower, safflower, horse gram (PHG-9), sesame, cowpea, chickpea, and maize in the North Dry Zone of Karnataka.
 - Continue sowing of *rabi* sunflower in Central Dry Zone.
 - As dry weather would prevail, undertake picking of early sown cotton in the North East Dry Zone of Karnataka.
 - Cloudy weather and light rainfall is congenial for incidences of tikka disease and pod borer in groundnut in the Eastern Dry Zone of Karnataka. Spray Carbendiazim @ 0.5g/litre of water to control tikka and Methomyl or Indoxcarb@ 2.0 ml/litre of water to control pod borer.
 - In the Southern Dry Zone of Karnataka, blue beetle insects were noticed in rice due to wet and humid conditions. To manage this pest, spray Chloropyriphos 20EC @ 2 ml/liters of water.
 - In North East Dry Zone of Karnataka, myrid and mealy bugs were noticed in late sown cotton which is in boll development stage. Spray Monocrotophos @ 2 ml or Profenophos @ 2 ml per litre of water to manage the pests.
 - **Kerala:**
 - As rain/thundershowers would occur at many places in Kerala along with isolated heavy rainfall during the period, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in

- standing crops. Provide adequate drainage in standing crop fields to remove excess water.
- Continue planting of banana, sowing of vegetables and fodder grass as intercrops in coconut gardens in the Southern Zone of Kerala.
- Due to prevailing humid and wet weather Foot rot and Pollu disease is observed in pepper in the Problem Area Zone of Kerala. Drench the basal portion of the vines with 2% pseudomonas solution followed by application of trichoderma enriched cowdung+ neem cake @1kg /vine as a control measure for foot rot and spray Mancozeb 3g/litre of water to control Pollu disease after current spells of rain.
- High relative humidity is congenial for the incidence of bud rot disease in coconut in the Central Zone of Kerala. Spray 1% Bordeaux mixture with gum on the crown, remove the affected parts and apply 1% Bordeaux paste to control the incidence after current spells of rain.
- Prevailing humid and wet weather conditions are congenial for blast and sheath blight in rice. Spray Carbendazim 50 WP @ 500 g/ ha after current spells of rain.
- **Tamil Nadu:**
- As rain/thundershowers would occur at many places over Tamilnadu on 3rd & 4th November along with isolated heavy rainfall, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in standing crops. Provide adequate drainage in standing crop fields to remove excess water.
- Continue transplanting of *thaladi* rice in the Cauvery Delta Zone of Tamil Nadu.
- In view of heavy rainfall, provide adequate drainage in coconut gardens in the Western Zone of Tamil Nadu.
- Leaf spot in black gram and green gram is observed in the South Zone of Tamil Nadu due to prevailing high cloud cover and humidity. Spray Carbendazim @ 1 g/ litre of water or Mancozeb 2 g/ litre of water to control leaf spot after current spells of rain.
- Suitable varieties are given in Annexure I.
- **Animal Husbandry**
- Vaccinate livestock against foot and mouth disease in in the Scarce Rainfall Zone of Tamil Nadu.

NORTHEAST INDIA [ARUNACHAL PRADESH, NMM&T, ASSAM, MEGHALAYA]



Rice



Okra



Cole Crops (Nursery)



Green Gram

- **Realised Weather:** Weather remained dry over the region. Yesterday, maximum temperatures were above normal by 2-5° C at many places over Assam & Meghalaya; at a few places over Manipur and Tripura and near normal over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during the period.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershower would occur at isolated places over northeastern states.
- **Advisories:**
 - **Assam & Meghalaya, Arunachal Pradesh:**
 - In Upper Bramhaputra Valley Zone, Lower Bramhaputra Valley Zone, Barak Valley Zone, Lower Bramhaputra Valley Zone and North Bank Plain Zone of Assam, continue sowing of rapeseed/ mustard and nursery sowing of winter tomato and planting of potato.
 - In Hill Zone of Assam, continue nursery raising of winter vegetables. Continue land preparation and sowing of black gram and green gram.
 - In Central Bramhaputra Valley Zone of Assam, continue transplanting of cole crops, land preparation and sowing of *rabi* pulses like lentil, rajmah, pea, lathyrus and oilseeds, land preparation for sowing of wheat and planting of potato.
 - In Lower Bramhaputra, Upper Bramhaputra and Central Bramhaputra Valley Zone and North Bank Plain Zone of Assam, to control rice bug in rice, apply Malathion 5% dust @20 kg/ha.
 - In Meghalaya, continue harvesting of *Kharif* rice if 80 % of the spikelets are turned yellow. Undertake sowing of pea, toria & lentil after harvesting of rice under zero tillage condition for utilization of residual moisture. Continue harvesting of groundnut. Continue sowing of mustard/rapeseed, transplanting of cole crops like cabbage, cauliflower, broccoli etc. and planting of potato.
 - In Arunachal Pradesh, drain out water from the fields of normal transplanted *kharif* rice 7-10 days before

harvesting to hasten maturity.

- In the prevailing hot weather condition, there is chance of attack of rice blast and stem borer in *Sali* rice in Hill Zone of Assam. Spray Hinosan @ 1ml /litre of water against rice blast and spray Chloropyriphos (20%) @ 2 ml/litre against stem borer. Also for control of shoot borer in turmeric and ginger, spray Rogor @ 0.05%.
- **Nagaland, Manipur, Mizoram and Tripura:**
- In Manipur, continue harvesting of matured *kharif* rice, groundnut, black gram and tomato. Continue sowing of rapeseed/ mustard, field pea and land preparation and planting of potato, nursery raising of onion.
- In Mizoram, continue sowing of pea, mustard and toria. Undertake nursery raising of tomato.
- In Mild Tropical Plain Zone of Tripura, continue harvesting of *aman* rice, land preparation for sowing of *rabi* maize and sesame, nursery sowing of winter vegetables and planting of potato. Apply mulching in early cauliflower, brinjal and radish.
- In Nagaland, continue nursery sowing of winter vegetables. Continue land preparation for toria and harvesting of matured *jhum* rice and soybean.
- In Mizoram, weather is congenial for attack of stem borer, gundhi bug and leaf blast in rice, spray Monocrotophos @ 20 ml/10 litres water or Imidacloprid @ 20 ml/10 litres of water against stem borer. Spray Monocrotophos 36 WSC @ 1.5 ml/litre of water against gundhi bug. Spray Triclozole (Beam) @ 0.5 g/litre against leaf blast.
- Suitable varieties are given in Annexure I.
- **Animal Husbandry**
- In Meghalaya, provide poultry birds (day old to 25 days old) artificial heating through lighting of electric bulb to protect from low temperature.
- In Tripura, present weather condition is favourable for infestation of round worm, flukes and tapeworms in cattle. De-worming may be done under recommendation and supervision of authorized practitioner.

EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM, ANDAMAN & NICOBAR ISLANDS]



Sugarcane



Groundnut



Onion



Rice

- **Realised Weather:** Rain/thundershowers occurred at many places over Andaman & Nicobar Islands. Weather remained dry over rest of the region. Yesterday, maximum temperatures were below normal by 2-4°C at a few places over Andaman & Nicobar Islands and at isolated places over Gangetic West Bengal. They were above normal by 2-5° C at a few places over Sub-Himalayan West Bengal & Sikkim and near normal over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at most places over Andaman & Nicobar Islands during the period. Dry weather would prevail over Sub-Himalayan West Bengal & Sikkim during next 24 hours and rain/thundershowers would occur at isolated places thereafter. Dry weather would prevail over Gangetic West Bengal, Odisha, Jharkhand and Bihar during the period.
- **Weather Warning:** Heavy rainfall would occur at isolated places over Andaman & Nicobar Islands during the period.
- **Weather Outlook:** Rain/thundershower would occur at many places over Andaman & Nicobar Islands. Weather would be dry over rest of the region.
- **Advisories:**
 - **West Bengal:**
 - Continue field preparation for sowing of wheat and planting of potato in Laterite and Red Soil Zone of West Bengal. Continue land preparation for nursery sowing of winter vegetables and mustard.
 - In New Alluvial Zone, continue land preparation for sowing of mustard and nursery sowing of winter vegetables. Undertake harvesting of early transplanted *aman* rice, if 80% of rice is ripened and prepare the main field for sowing of *rabi* crops.
 - In Coastal Saline Zone, complete transplanting of cabbage, cauliflower, tomato. Also undertake sowing of early mustard variety like agrani, panchali.
 - In Old Alluvial Zone, continue nursery sowing/ sowing of winter vegetables like radish, broccoli, land preparation for sowing of mustard and harvesting of matured *aman* rice.
 - In Terai Zone, continue land preparation for planting of potato, mustard, nursery sowing of chilli, tomato, radish

and broccoli.

- Due hot and humid weather, there is a chance of attack of stem borer in *aman* rice in New Alluvial Zone. Spray Carbosulfan 25 EC @ 2 ml / litre or Profenphos 40% + Cypermethrin 4% @ 1 ml / litre of water against stem borer.

- **Andaman and Nicobar**

- As rain/thundershowers would occur at many places over Andaman and Nicobar islands along with isolated heavy rainfall, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in standing crops. Provide adequate drainage in standing crop fields to remove excess water.
- In North and Middle Andaman, undertake nursery sowing/sowing of winter vegetables after current spells of heavy rain.

- **Odisha:**

- Continue sowing of mustard, sunflower and sesame, nursery sowing of onion and transplanting of cole crops in East and South Eastern Coastal Plain Zone of Odisha.
- In North Central Plateau Zone of Odisha, undertake land preparation and sowing of wheat.
- In East and South Eastern Coastal Plain Zone of Odisha, present weather is optimum for sowing of rainfed groundnut in river banks, green pea and mustard. Also undertake nursery raising of onion and sowing of sunflower under irrigated condition.
- In North Eastern Coastal Plain Zone of Odisha, due to high humid weather, there is chance of blast and Sheath rot/blight in rice. To manage blast, apply Tricyclazole @ 0.5 g/litre of water or Kasugamycin @ 1.5 g/litre of water. For control of Sheath rot/blight, alternate application of Hexaconazole @ 400 ml/acre and Thiophanate methyl @ 300 g/acre at two weeks interval is advised.
- In North Eastern Plateau Zone of Odisha, due to cloudy and high humid weather, there is chance of Tikka leaf spot in groundnut. To control, spray Mancozeb @ 2.5 g per liter of water.
- Prevailing humidity and temperature are conducive for incidence of leaf roller and case worm in rice in East and South Eastern Coastal Plain Zone of Odisha. To control, spray Triozophos or Fipronil or Hostathion @ 200 ml in 200 litres of water per acre.
- In Western Undulating Zone of Odisha, bacterial leaf blight has been observed in rice and likely to spread in the present weather. Spray Streptocycline @0.1g + Carbendazim @ 2g in one litre of water with mixing sticker @ 0.5 ml/litre of water. Spray 200 litres of pesticide solution per acre preferably during morning hours.

- **Bihar:**

- In North West Alluvial Plain Zone of Bihar, continue sowing of maize, pea, sunflower, garlic, lentil and planting of potato. Continue harvesting of matured rice. Undertake sowing of rajma. Prepare nursery bed for onion crop.
- In North East Alluvial Zone of Bihar, undertake sowing of lentil, peas, rai, sunflower and transplanting of mature seedlings of cauliflower, cabbage, broccoli and tomato in raised bed. Undertake harvesting of matured rice.

- **Jharkhand:**

- In Western Plateau Zone of Jharkhand, undertake sowing of gram, lentil, linseed. Also continue sowing of mustard and rainfed wheat. Continue planting of early potato and sowing of green peas. Continue harvesting of already matured rice. Undertake sowing of barley.
- In Central & North Eastern Plateau Zone of Jharkhand, continue sowing of toria, mustard, green pea and planting of potato. Undertake nursery raising of onion. Undertake sowing of wheat, gram, lentil, linseed. Undertake harvesting of rice.
- In South Eastern Plateau Zone of Jharkhand, continue land preparation/sowing of chick pea. Continue nursery raising of onion. After harvesting of rice, undertake sowing of rainfed wheat. Undertake sowing of field pea and linseed.
- Due to humid weather, there are chances of infestation of beetles in pigeon pea in South Eastern Plateau Zone of Jharkhand, spray Chlorpyrifos @ 1.5 ml per liter of water for control.
- Suitable varieties are given in Annexure I.

CENTRAL INDIA [M.P., CHHATTISGARH]



Sugarcane



Rice



Okra



Onion

- **Realised Weather:** Weather remained dry over the region. Yesterday, maximum temperatures were below normal by 2-4°C at isolated places over East Madhya Pradesh. They were above normal by 2-5° C at isolated places over West Madhya Pradesh and near normal over rest of the region.
- **Weather Forecast:** Dry weather would prevail over Madhya Pradesh and Chhattisgarh during the period. Minimum temperatures would fall by 2-4°C over many parts of West Madhya Pradesh during next 24 hours.
- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be dry over the region.
- **Advisories:**
 - **Madhya Pradesh:**
 - Continue land preparation and sowing of mustard, green pea, gram and planting of potato in Gird Zone of Madhya Pradesh.
 - Continue land preparation for sowing of wheat, gram and planting of winter sugarcane in Vindhya Plateau Zone of Madhya Pradesh.
 - Continue sowing of vegetable pea, mustard, toria and field preparation for planting of potato in Kymore Plateau and Satpura Hill Zone.
 - Continue harvesting of soybean and sowing of pea, early planting of potato in Malwa Plateau Zone. Also undertake transplanting of onion, tomato, brinjal, chilli, cabbage and cauliflower on the prepared beds.
 - Undertake land preparation and sowing of wheat and gram in Nimar Valley Zone.
 - Continue harvesting of matured soybean, green gram, black gram, groundnut and maize in Jhabua Hills Zone. Continue land preparation for sowing of mustard, gram and wheat and keep inputs ready. Continue nursery sowing of early winter vegetables (tomato, chilli, brinjal, cauliflower, cabage, capsicum), sowing of early green pea and planting of early potato. Apply irrigation in cotton at flowering/boll formation stage under moisture stress condition.
 - Due to cloudy weather there are chances of attack of sucking pest in vegetables in Vindhya Plateau Zone of Madhya Pradesh, spray Imidacloprid or Thiamethoxam @ 0.35 g per litre of water.
 - **Chhattisgarh:**
 - Continue harvesting of matured rice in North Hill Zone and keep it in the field for proper sun drying for 1-2 days.
 - Continue land preparation and sowing of *rabi* crops like toria, green pea, mustard, gram, linseed etc. and planting of early potato in North Hill Zone and Chhattisgarh Plain Zone utilising the available soil moisture.
 - Undertake nursery sowing of cauliflower, tomato, brinjal, chilli etc. and cultivation of leafy vegetables like coriander, fenugreek and palak in Chhattisgarh Plain Zone. Continue harvesting of matured rice and soybean.
 - Continue land preparation for sowing of toria, green pea, linseed and nursery sowing of vegetables like, chilli, cauliflower, tomato etc. in Bastar Plateau Zone.
 - Suitable varieties are given in Annexure I.

NORTH INDIA [JAMMU & KASHMIR, HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]



Rice

Sugarcane

Bottle Gourd

Onion

- **Realised Weather:** Weather remained dry over the region. Yesterday, maximum temperatures were below normal by 2-4°C at a few places over Jammu & Kashmir and Uttar Pradesh. They were above normal by 2-5° C at a few places over Himachal Pradesh; at isolated places over Uttarakhand and near normal over rest of the region. Yesterday the lowest minimum temperature of 11.5°C was observed at Narnaul (Haryana).
- **Weather Forecast:** Rain/thundershowers would occur at a few places over Jammu & Kashmir on 3rd; at many places on 4th and at a few places thereafter. Rain/thundershowers would occur at isolated places over Himachal Pradesh on 3rd; at a few places on 4th and at isolated places thereafter. Dry weather would prevail over Uttarakhand during next 24 hours and rain/thundershowers would occur at isolated places thereafter. Dry weather would prevail over Haryana & Delhi, Uttar Pradesh, Rajasthan during the period. Dry weather would prevail over Punjab during next 24 hours and rain/thundershowers would occur at isolated places on 4th and dry weather would prevail thereafter. Minimum temperatures would fall by 2-4°C over many parts of Rajasthan during next 24 hours. No significant change in minimum temperatures over plains of northwest India during next 2 days. Shallow fog would

occur at isolated places over Punjab, Haryana & Delhi and West Uttar Pradesh during next 3 days in the morning hours.

- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershower would occur at a few places over Western Himalayan region. Weather would be dry over rest of the region.
- **Advisories:**
 - **Jammu & Kashmir:**
 - As rain/thundershowers would occur at many places over Jammu & Kashmir on 4th November, postpone irrigation, intercultural operations and application of fertilizers and plant protection measures in standing crops.
 - Continue land preparation for sowing of oat and continue sowing of wheat, barley, toria, mustard, pea, gram, lentil, vegetables viz. (cauliflower, cabbage, radish and knoll khol) in Intermediate Zone of Jammu & Kashmir.
 - In Sub-Tropical Zone of Jammu & Kashmir, continue land preparation for sowing of wheat, mustard, toria, ghobi sarson, pulses viz. chickpea, pea and lentil, direct sowing of vegetable crops like radish, spinach, peas, methi, coriander, turnip and planting of potato and garlic. Continue transplanting of knolkhol, broccoli, cabbage & cauliflower.
 - Continue land preparation for sowing of vegetables viz. peas, spinach and methi and planting of garlic in Valley Temperate Zone of Jammu & Kashmir.
 - **Himachal Pradesh:**
 - Continue sowing of early wheat, planting of potato and sowing of early varieties of pea and onion in Lower and Mid Hills regions of Sub-Montane and Low Hills Sub-Humid Tropical Zone of Himachal Pradesh. Continue sowing of radish, turnip, carrot and fenugreek and transplanting of cabbage, cauliflower and broccoli. Continue sowing of gobhi sarson, linseed and sowing of berseem, lucerne and oats as fodder crops during *rabi* season. Continue sowing of barley in high altitude areas. Complete sowing of gram and lentil in lower areas.
 - Complete sowing of radish, turnip and spinach in Mid Hills Sub-Humid Zone of Himachal Pradesh. Continue nursery preparation for sowing of late season cauliflower and cabbage.
 - Undertake harvesting of cauliflower and sowing of Chinese cabbage, cabbage and coriander in High Hill Dry Temperate Zone of Himachal Pradesh.
 - Under prevailing humid weather condition, there are chances of attack of blister blight in tea in Sub-Montane and Low Hills Sub-Humid Tropical Zone of Himachal Pradesh. Spray Calixin @ 0.2% or folicure 0.1% and if attack is severe then repeat spray at 15 days with alternate spray of Blitox 0.3% at seven days interval.
 - Under prevailing humid weather condition, there are chances of attack of cut worm in cauliflower in Sub-Montane and Low Hills Sub-Humid Tropical Zone of Himachal Pradesh. Chloropyriphos 20 EC @ 80ml mixed in 1kg of sand can be spread in the fields.
 - **Uttarakhand:**
 - Continue land preparation for sowing of wheat and planting of potato in Hill Zone. Continue transplanting of onion and sowing of garlic, mustard, palak, methi, radish, early toria, pea.
 - After harvesting of matured rice and soybean, continue land preparation and sowing of wheat and continue sowing of mustard and planting of autumn sugarcane in Bhabar and Tarai Zone of Uttarakhand. Also continue sowing of vegetables viz. pea, coriander, spinach and radish.
 - Continue sowing of mustard, chickpea, pea, nursery sowing of vegetables like brinjal, tomato and planting of potato and continue field preparation for planting of winter sugarcane in Sub Humid Sub Tropical Zone of Uttarakhand.
 - **Punjab, Haryana and Delhi:**
 - In Western Undulating Zone of Punjab, continue nursery sowing of mid-season cauliflower, desi varieties of radish, carrot under irrigation and turnip and planting of mango, litchi and apply irrigation in rice, cotton and maize.
 - In Central Plain Zone of Punjab, continue sowing of desi varieties of carrot, radish and turnip crops and undertake transplanting of tomato under irrigation. Continue planting of potato and nursery sowing of cauliflower. Continue harvesting of matured maize and groundnut in Ludhiana district. Continue planting of early maturing autumn sugarcane.
 - In Undulating Plain Zone of Punjab, continue sowing of long duration wheat, lentil and continue sowing of gram.
 - In Western Zone of Punjab, complete harvesting of rice. Undertake sowing of raya, gobhi sarson, *rabi* onion, carrot, tomato. Prepare the field for planting of potato.
 - In Western Zone of Haryana, prepare the fields for sowing of mustard and gram and arrange the certified seeds for mustard and gram. As dry weather would prevail, harvest matured guar, bajra and continue the picking of matured cotton bolls of early sown cotton.
 - Present weather is favourable for attack of top borer in sugarcane in Western Zone of Haryana, apply Carbofuran 3G @13 kg or Phorate 10G @ 8 kg in furrows and apply light irrigation.
 - In Delhi, continue transplanting of onion seedlings and planting of early potato, winter sugarcane. Continue land preparation for sowing of early mustard, pea and early toria and sowing of radish, spinach, sarson, *rabi* onion, carrot and coriander. Complete the harvesting of rice.

▪ **Uttar Pradesh:**

- Continue harvesting of early varieties of rice in Eastern Plain Zone and Central Plain Zone of Uttar Pradesh. Maintain 5cm water level in rice at grain formation stage.
- Undertake planting of potato and sowing of carrot, radish Lahi, lentil, linseed, berseam with available soil moisture in Allahabad, Fatehpur, Pratapgrah, Chitrakut and Kaushambi districts of Central Plain Zone of Uttar Pradesh. Complete sowing of gram upto second week of November and planting of sugarcane upto first week of the month. Undertake harvesting of cauliflower and cabbage.
- As dry weather would prevail, apply irrigation in late sown rice in Central Plain Zone of Uttar Pradesh. Undertake planting of potato and sowing of rapeseed, gram, peas and maize with available soil moisture.
- Continue sowing of gram, peas, lentil, rapeseed and mustard and planting of potato with available soil moisture in Basti, Faizabad, Sant Kabir Nagar and Gorakhpur districts of Eastern Plain Zone of Uttar Pradesh.
- Continue land preparation for sowing of garlic, coriander and fenugreek in Eastern Plain Zone of Uttar Pradesh.
- Continue sowing of taramira, alsi, berseem and planting of sugarcane and potato in Western Plain Zone of Uttar Pradesh with available moisture.
- Undertake sowing of peas, lentil, gram, mustard and rapeseed in Jhansi district of Bundelkhand Zone of Uttar Pradesh. Keep the inputs ready for sowing of drought resistant varieties of wheat crop.
- Under prevailing hot weather condition, there are chances of attack of army bug in rice in Central Plain Zone of Uttar Pradesh. For control, spray Chlopyriphos 20 EC or Quinolphos 25Ec @ 1.5 ml per 400-600 litres of water.

▪ **Rajasthan:**

- Continue sowing of lentil and continue land preparation and sowing of mustard, barley, nursely sowing of cauliflower, cabbage and planting of potato in Flood Prone Eastern Plain Zone of Rajasthan.
- Continue land preparation and sowing of wheat, lentil, gram in South eastern Humid Plain Zone of Rajasthan
- Continue land preparation and sowing of lucerne, taramira, methi and mustard in Transitional Plain Zone of Inland Drainage of Rajasthan.
- Continue field preparation for the sowing of wheat and barley and complete sowing of mustard and gram. Continue nursely sowing of cauliflower and radish and rainfed taramira, toria in Semi Arid Eastern Plain Zone of Rajasthan.
- Continue sowing of cummin, rapeseed (sarson) in Arid Western Plain Zone (Jodhpur) of Rajasthan.
- Continue land preparation and sowing of rapeseed, gram, linseed in irrigated North Western Plain Zone of Rajasthan.
- In Sub Humid Southern Plain and Aravali Hill Zone of Rajasthan, continue sowing of wheat gram and mustard and continue harvesting of maize and sorghum.
- Present weather is congenial for attack of mealy bug on mango, guava and pomegranate trees in Semi Arid Eastern Plain Zone of Rajasthan. To control, mix Quinalphos @ 1.5 % and Methyl Parathion 2% dust @ 50-100 g per tree pit in soil at a depth of 10-25 cm on a non rainy day.
- Suitable varieties are given in Annexure I.

• **Floriculture**

- Continue nursery raising of winter flowers in poly houses in Sub Montane and Low Hills Sub-Tropical; Zone of Himachal Pradesh. For the control of blue beetle in roses and balsam, spray Cypermythrin @0.05%. Present weather is conducive for attack of mites in carnation. For control, spray Cypermythrin @0.05% at 15 days interval.

• **Animal Husbandry:**

- Under prevailing humid weather condition, there are chances of attack of ticks and mites on animals in Sub Montane and Low Hills Sub-Tropical; Zone of Himachal Pradesh and Intermediate Zone of Jammu & Kashmir. For control spray Butox @ 2.0 ml per litre of water. Clean the cowshed with phenyl and keep the animal sheds dry and clean.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



Rice



Sugarcane



Cotton



Soybean

- **Realised Weather:** Weather remained dry over the region. Yesterday, maximum temperatures were below normal by 2-4°C at isolated places over Saurashtra & Kutch. They were above normal by 2-5°C at many places over Maharashtra; at a few places over Gujarat state, Konkan & Goa, and near normal over rest of the region.
- **Weather Forecast:** Dry weather would prevail over Maharashtra and Gujarat State during the period. Minimum

temperatures would fall by 2-4°C over Gujarat from tomorrow.

- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be dry over the region.
- **Advisories:**
 - **Maharashtra:**
 - In Konkan, complete harvesting of already matured mid late and late maturing rice variety and matured finger millet. Complete sowing of brinjal, chilli, cabbage and knol khol on raised beds. Apply irrigation, fertilizers and intercultural operations in vegetable crops and mango and cashew orchards.
 - In Madhya Maharashtra, apply irrigation to sugarcane, vegetables and grapes, banana and pomegranate orchards, safflower and *rabi* jowar. Complete harvesting of matured rice in Kolhapur region and continue harvesting of matured rice in Western ghat region and Western parts of Pune district. Continue intercultural operations like weeding and fertilizer application in sugarcane, vegetables, *rabi* jowar and orchards. Continue sowing of wheat. Also continue sowing of irrigated gram and planting of pre-seasonal sugarcane. Continue picking fully opened cotton boll during morning hours. Undertake the planting of banana.
 - In Marathwada, apply irrigation to sugarcane, red gram and vegetables. Continue intercultural operation like weeding and fertilizer application to sugarcane, *rabi* jowar and vegetables. Complete sowing of *rabi* safflower. Continue sowing of irrigated gram and wheat. Start picking fully opened cotton boll (irrigated and early sown) during morning hours. Continue planting of pre-seasonal sugarcane.
 - In Vidarbha, as dry weather is prevailing, apply irrigation in vegetables and orange, sweet lime orchards. Apply fertilizers and continue intercultural operations in vegetables. Maintain water level up to 8 cm in rice fields in East Vidarbha. Complete sowing of safflower with the help of available soil moisture. Continue harvesting of early maturing rice crop and start harvesting mid late rice in East Vidarbha. Continue picking of fully opened cotton boll (early sown) in West Vidarbha. Start sowing of irrigated wheat.
 - Rise in temperature and humid weather in Central Vidarbha zone, there may be attack of aphids and jassids in cotton; spray Acetamiprid 20 % @ 4 gm per 10 litres of water.
 - Due to cloudy weather during last week in Marathwada, there may be attack of hoppers on new mango flush and inflorescence; spray Cypermethrin 3 ml per 10 litres of water on whole tree.
 - Rise in day temperature and humid weather in Pune region is favourable for downy mildew in cucumber, ridge guard and bottle guard; spray Metalaxyl 8 % + Mancozeb 64 % @ 20 g per 10 litres of water. Same may be repeated after 10-12 days.
 - **Gujarat**
 - Complete harvesting of matured groundnut in North Gujarat Zone and North West Zone, harvesting of matured pearl millet, groundnut and picking of cotton in North Saurashtra Zone, harvesting and threshing of rice and pearl millet and picking of cotton in Middle Gujarat Zone, harvesting of matured rice South Gujarat Heavy Rainfall Zone, harvesting of matured rice, groundnut and fruits in Bhal and Coastal Zone and harvesting of groundnut in South Saurashtra Zone.
 - Undertake sowing of mustard, gram and fennel in North Gujarat Zone, sowing of mustard and fennel in North West Zone, sowing of wheat, gram, mustard and fennel in Bhal and Coastal Zone, sowing of mustard, gram, peas, carrot and garlic in North Saurashtra Zone, sowing of *rabi* crops in South Saurashtra Zone and sowing of chickpea, sweet corn and planting of sugarcane in South Gujarat Heavy Rainfall Zone and South Gujarat Zone.
 - Suitable varieties are given in Annexure I.
- **Animal Husbandry**
 - In North Saurashtra Zone, spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes.

Annexure I List of varieties

Tamil Nadu

Late Samba/ Thaladi rice: ADT 38, ADT 46, ADT 49, Improved white Ponni, IR 20, ASD 19, Paiyur1, TRY 1, TRY 3, CO 48, CO 49, BPT 5204 and CO 50

Direct seeded rice: (White Ponni or ADT 39)

Assam

Green gram: T-44, Kopergaon, K-851, ML-56, ML-131 etc.

Black gram : T-9, T-27, Pant U-19, T-122.

Radish : Pusa Deshi, Pusa Chetki, Pusa Himani

Cauliflower : Improved Japanese, Pusa Synthetic, Pusa Snowhall and Main Crop Patna. Early maturity Cabbage varieties : Golden Acre, Pride of India, Pusa Mukta (Sel – 8).

Early maturity Knol Khol : White Vienna.

Winter brinjal : Pusa Kranti, Pusa Purple Long, Pusa Purple Round, Pusa Vairab, Pant Samrat

Meghalaya

Pigeon pea: short duration : UPAS-120, ICPL 87. long duration WB 20, Pusa 9 & Sarita.

Cabbage: H-139, Pride of India

Cauliflower: Meghalaya Local

Carrot: New Karoda, Nantesh

Radish: Local genotype

Broccoli: Puspa, Aiswarya

French bean: Naga Local

Pea: Arkel (for vegetables), TRC P8, TRC P9, Prakash, Rachna.

Potato: Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini.

Pea: Arkel (for vegetables), TRC P8, TRC P9, Prakash, Rachna.

Tripura

Tomato: Trishul, Allrounder, T- 1408, T- 1458, Anup.

Cauliflower: CFL- 4048, Pusa early synthetic, Kamaya, Suhasi.

Cabbage: BC- 76, Pusa Drum Head, Pusa Synthetic.

Broccoli: Everest, Ayeshwaria.

Odisha

Sesame: Kanak, Kalika, Uma, Usha, Tilotama, Nilima, Prachi

Greengram: K-851, PDM-11, PDM-54, OUM-11-5

Blackgram: T-9, Pant U-11, Pant U-19, Pant U-30

Cowpea: SEB-2, Pusa Barsati Niger: Deomali, Niger-1 and for Okra: Utkal Gourav.

West Bengal

Banana: Mortoman, Chapa, Kathali, Singapuri.

Tomato: Avinash-2, 448.

Cabbage: Pride of India, Pusa early, Kranti.

Cauliflower: Jawhar moti, Bharat Jyoti, Early banaras

Bihar

Potato: Jyoti, Kufri Ashoka, Kufri Pukharaj, Kufri Chandramukhi, Kufri Badhsha, Kufri Lalima, Kufri Arun and Rajendra Alu 2.

Maize: Shaktiman-1, Shaktiman-2, Dewki and Lakshmi varieties for white maize and Shaktiman-3, Shaktiman-4 and Suan for yellow maize.

Pea: Malviya mater15, Arpana, Rachna and Pusa Prabhat, Ratna, Harbhajan.

Onion: Agrifound Light Red(ALR), Arka Niketan and N-2-4-1.

Garlic: Jamuna Safed-2(G-50), Jamuna Safed-3(G-282), and Jamuna Safed-4 (G-323).

Lentil: DPL-15,DPL-62,KLS-218,HUL-S7,IPL-81 and K-75, BR 25, Pant L406 639,Malika, Arun.

Rajma: PDR-14(Udai), IIPR96-4(Amber) and IIPR98-5(Utkarsh).

Sunflower: CO-1, Pairadevik, Surya, Mordane for composite and BSH-1, KBSH-1, KBSH-44 for hybrid.

Rai: Varuna, Pusa bold and Kranti.

Jharkhand:

Wheat: like HDR-77, K-8027, C-306, Birsa genhu-3

Mustard: like Shiwani, Varuna, Pusa Bold, BR-40.

Linseed: Shweta, Shubhra, T.-397, Shekhar.

Gram: for Deshi (indigenous) gram are B.G.-372, B.G.-256, K.W.R.-108, Pant G.-186, Pant G.-114 and for Kabuli gram are H.K.-94-134, B.G.-1053, B.G.-1003.

Lentil: P.L.- 406, P.L.-639, D.P.L.- 15, D.P.I.- 62

Barley: Jyoti, Ratna, D.L.-36, B.R.-32 (all irrigated condition) and B.R.-31, K.-125 (un irrigated condition).

Potato: Kufri Ashoka and Kufri Pokhraj, Kufri Pushkar, Kufri Lalima, Kufri Kanchan and

Pea: Arkel and Azad pea.

Chick Pea: Birsa chana -3, B.G.- 372, B.G.-256, K.W.R.-108, Pant G.-108, 114 and Kabuli type varieties like B.G. 1053, 1003, H.K.-94-134 and Kak 2 etc.

Field Pea: Rachna, D.D.R.-23, Swarnrekha etc

Madhya Pradesh

Gram: JG-130, JG-11, JG-315, JG-16

Wheat: Sujata, HW-2004, HI-1500

Winter Sugarcane: KJN 86-572, KJN 86-141

Green Pea: Arkel, PSM-3

Jammu & Kashmir

Berseem: Mescavi, Pusa Giant, BL-1 and Vardan

Uttarakhand

Pea: VL Ageti Mater-7, Vivel Mater-10, Pant Subjee Mater-3, Azad Mater-3 and Arkel

Potato: Kufri- Jyoti, Ashok, Anand

Toria : Pant Toria-30, 303, 507 or local varieties.

Himachal Pradesh

Peas: Palam Triloki, Arkel, VL-7 and Matar Ageta

Late variety of Cauliflower: broccoli

East Uttar Pradesh

Cabbage: Imprabad Japani, Pusa chipali and Pusa kartiki

Radish: Japani white, Pusa chetakij, Hisar Muli No.1 and kalyanpur-1

Toria: T-9, T-36, Pant -30,303, B-9

Potato: Kuferi - Chandramukhi, Bahar

Mustard: Basati, Maya, Kanti, Urvashi, Narendra, Swarna-8, Narendra Ageti-4

Ageti Matar: Kashi - Nandini,Uday, Mukti, Arkel, Azad-3

West Uttar Pradesh:

Toria: Sangam, TL-17, 67

Ageti matar: Azad P-3, Arkel

Maharashtra

Madhya Maharashtra

rabi jowar: Selection-3, Phule Mauli, Phule Anuradha in light soil, Phule Chitra, Maldandi-35-1 in medium soil and Phule Vasudha, Phule Yashodha in black soil

Safflower: Bhima or Phule Kusuma

Banana: Srimanti, Grand Naine or Basrai

Marathwada

Jowar: Parbhani Moti or Parbhani Jyoti.

Safflower: PBNS-12, DSF168-4, JLSF-414

Gram: Akash, Vikas, Vishvas or Vijay

Vidarbha

Wheat(irrigated): HD-2189, AKW-1071, HD-2380, MACS-2496.

Gujarat:

Pea: Pusa Pragati.

Carrot: Pusa Rudhira and Pusa Kesar.