

Summary of Agromet Advisory Services for different States of the country Issued by Agricultural Meteorology Division, India Meteorological Department, Pune, India

Thursday, 12th October, 2006

(For the period 12th October to 16th October, 2006) The extended version of the bulletin is also available at <u>http://imdagrimet.org</u>



On 9th October southwest monsoon has further withdrawn from remaining parts of East Uttar Pradesh, Madhya Pradesh & Gujarat, entire Bihar & Sub-Himalayan West Bengal & Sikkim, most parts of Jharkhand and northern parts of Gangetic West Bengal, Chhattisgarh & Maharashtra. The withdrawal line passes through Cooch Behar, Bankura, Durg, Akola and Dahanu.

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

Punjab

Weather remained dry.

Dry weather is likely over the State.

Advisories

- Conserve moisture wherever the crops are at maturity stage.
- Cotton crop is susceptible to the incidence of bollworm and other leaf eating caterpillar. Farmers are advised to undertake plant protection measures against spotted boll worm by spraying Quinalphos @ 1.5-2 litres/ha in 800 litres of water.
- Incidences of shoot borer and Gurdaspur borer are reported in sugarcane. Spray Nuvacran @ 1.5 litres of water to control the pests, if the population exceeds ETL.
- Farmers are advised to monitor the locust and carry out antilocust operations i.e. spray of pesticides on standing crops and vegetation to manage the damage from any possible locust invasion.
- Undertake sowing of berseem along with javi and sarson by utilizing the residual moisture. Also conserve soil moisture to take up sowing of *rabi* crops.

Haryana

Weather remained dry.

Mainly dry weather is likely over the State.

Advisories

- Conserve moisture wherever the crops are at maturity stage.
- Incidences of boll worm are reported in cotton. Spray Monocrotophos @ 1.5 litre/ha in 800 litres of water to control the pests, if the population exceeds ETL.
- Farmers are advised to monitor the locust and carry out antilocust operations i.e. spray of pesticides on standing crops and vegetation to manage the damage from any possible locust invasion.
- Undertake sowing of berseem by utilizing the residual moisture. Also conserve soil moisture to take up sowing of *rabi* crops.
- Continue harvesting of rice, groundnut, maize and pulses on bright sunny days.
- This is proper time for sowing wheat and gram. Use the certified seed of recommended varieties i.e. WH-542,147,157 711 C-306 (Barani Conditions) and PBW-343, WH-711, WH-423 Sonak PBW-373 (Irrigated conditions) for wheat. Select desi and kabuli varieties for gram.

Rajasthan

Weather remained dry in all divisions of the State.

Mainly dry weather is likely over the State.

Advisories

- As all the standing crops in the state are now at maturity stage, conserve moisture in the soil.
- Continue harvesting of matured crops of bajra, maize and pulses.
- This is proper time for sowing mustard. Continue land preparation and sowing.

Uttar Pradesh

Weather was mainly dry in all divisions of the State during the period.

Weather is likely to be mainly dry in the State.

Advisories

- There was no significant rain during last week and mainly dry weather is likely to prevail over the State for the next three days. Under the circumstance apply irrigation to bring the soil moisture to its field capacity.
- Continue weeding and hoeing, along with top dressing of nitrogen to toria.
- To control gummosis disease in mango spray solution of Napthalene Acetic Acid 200 PPM and 4ml planofix / 9 litre of water.
- Transplanting of winter vegetables like cauliflower, brinjal, chilli and tomato may done.
- Harvesting of matured sugarcane, pulses, oilseeds and vegetables may be done.

Himachal Pradesh

The weather was mainly dry during the week in the state.

Mainly dry weather is likely over the state.

- As there was no rain during last few weeks and mainly dry weather is likely over the State for next three days, apply irrigation to vegetable crops to bring the soil moisture to field capacity.
- Conserve soil moisture wherever the crops are at maturity stage.
- Harvest the matured crops of rice, maize, potato, moong and apple.
- Continue land preparation and sowing of Arcle peas in the high hills and preparation of nursery of cauliflower and cabbage in lower hills and transplanting of cauliflower and cabbage in mid hills and sowing of radish, turnip and carrot.
- Monitor the crop for attack of citrus leaf minor, if attack crosses economic threshold level, spray Nuvan @ 1ml per litres of water and repeat spray if it persists.

Uttaranchal

Mainly dry weather prevailed during the period. Sky remained mainly clear.

Mainly dry weather is likely over the State.

Advisories

- Weather was dry in the state during last week and mainly dry weather is likely to prevail over the State for next 3 days. Under the circumstances, apply irrigation to mango, sugarcane and vegetable crops to bring the soil moisture to its field capacity.
- Maintain 5 7 cm water in rice field.
- Continue sowing of toria, pea and potato.

Jammu & Kashmir

Weather remained mainly dry over the State.

Weather will be mainly dry in the State.

Advisories

- Keep vigil against **desert locust** to prevent crop damage.
- Conserve moisture wherever the crops are at maturity stage.
- Continue sowing of carrot, beet root and turnip for seed crop in Jammu division. Undertake transplanting of methi, palak, coriander, radish, cabbage and knol-khol in Kashmir division.
- Continue sowing of toria crop in Jammu division and brown sarson, lentil and wheat in Kashmir division to utilize residual moisture. Before sowing, undertake ploughing followed by planking to conserve moisture.
- This is proper time for sowing sarson. Select GSL1 and DGS 1 for sowing in Kashmir division.

Delhi

Weather remained mainly dry.

Mainly dry weather is likely over the State.

Advisories

- As there was no rainfall during last week and mainly dry weather is likely over the State for next three days, apply irrigation to early sown vegetable crops and bajra to bring the soil moisture to its field capacity.
- Prepare land and continue transplanting of 4 6 weeks old varieties of cauliflower and cabbage plants.
- Prepare nursery for snowball variety of cabbage and cauliflower varieties like Pusa Synthetic, Pusa Subhra and Pusa Himjyoti.
- Prepare land and perform sowing of Japani White and White Asikal varieties of raddish, Pusa Kesar, Pusa Mughali, Pusa Desi and Nanty varieties of carrot and Pusa kanchan, Purple top, White Glone, golden Ball and Pusa Chandrama varieties of turnip. Treat the seeds with Captan or Thairam or Dithane M- 45 @ 2 g / kg seeds.
- Prepare land and continue sowing of toria, mustard and berseem.
- Monitor ergot disease of bajra and if noticed, remove the plants and burn them well outside the field.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was weak over the State on 11th October. Rain occurred at many places on 9th & 10th October and at a few places on 11th October.

Rain / thundershowers are likely at many places over the State.

Warning: Isolated heavy falls are likely over the State.

Advisories

- Rain/thundershowers are likely to occur at many places in the State for the next three days. Under the circumstance, postpone irrigation to plantation crops.
- Arrange for drainage facilities in case of heavy rainfall.
- Continue intercultural operations and fertilizer application after spells of rain in arecanut, coconut, pepper, rubber and banana.
- Attack of gall midge is reported in *mundakan* rice nursery. Dip the roots of seedlings in 0.02% Chlorpyriphos for 12 hours at the time of transplanting to prevent further spread.
- Attack of rhinoceros beetle and red palm weevil insects and stem bleeding disease is reported in coconut. Hook out the beetles from the affected palms and fill the leaf axils with Sevidol 8 G @ 25 gm and fine sand 200 gm. Use Pheromone trap for controlling red palm weevil. Cut stem bleeding affected region and paste with coal tar. Spraying of chemicals may be continued after spells of rain.

Tamilnadu

Rainfall occurred at a few places over the State on 9th and 11th October and at isolated places on 10th October.

Rain / thundershowers are likely at a few places over the State.

Advisories

- There was no significant rainfall in the state except in Cuddalore, Dharmapuri, Dindigul, Krishnagiri, Nilgiris, Pudukkottai, Salem, Sivagangai, Theni, Thiruvarur, Thiruvannamalai, Vellore and Villupuram districts during last week and rain/ thundershowers is likely to occur at a few places over the State for the next three days. Under the circumstances, apply required irrigation to pulses, early/mid sugarcane and millets to bring the soil moisture to its field capacity. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Continue nursery sowing of *samba* rice.
- Continue intercultural operations to keep the field weed free and application of fertilizers and pesticides on a non rainy day to early/mid sugarcane and *kar* rice.
- Monitor sugarcane for internode borer. Release *Trichogramma chilonis* parasite @ 5 cc / ha on a non rainy day to control the pest. Repeat after 15 days.
- Complete harvesting of late season sugarcane, pulses, groundnut and millets. Continue picking of matured kapas of cotton on bright sunny days.

Karnataka

Monsoon was active on 9th October and weak on 10th & 11th October over Coastal Karnataka. Over North Interior Karnataka, it was weak on 10th & 11th October. Over South Interior Karnataka, it was active on 9th October and weak on 11th October. Rainfall occurred at isolated places on 10th & 11th October over Coastal Karnataka. Over North Interior Karnataka, rainfall occurred at a few places on 9th October and at isolated places on 10th & 11th October. Over South Interior Karnataka, rainfall occurred at a few places on 9th October and at isolated places on 10th & 11th October. Over South Interior Karnataka, rainfall occurred at isolated places on 10th & 11th October.

Rain / thundershowers likely to occur at many places over Coastal Karnataka, at a few places over South Interior Karnataka and at isolated places in North Interior Karnataka.

Warning: Isolated heavy falls are likely over Coastal Karnataka.

- Postpone irrigation, intercultural operations and application of fertilizers in Coastal Karnataka as rain / thundershowers likely to occur at many places for the next three days.
- Arrange for drainage facilities as heavy rainfall is likely to occur at isolated places.

- There was no significant rainfall in Interior Karnataka during last week. Rain / thundershowers are likely at a few places over South Interior Karnataka and at isolated places in North Interior Karnataka for the next three days. Under the circumstances, apply irrigation to sugarcane, maize, jowar and groundnut crops to bring the soil moisture to its field capacity.
- Wooly aphid incidence in sugarcane is reported at Mysore, Mandya, Hassan, Bidar & Bagalkote districts. Release predators like *Dipha* sp after spells of rain in coastal Karnataka and on a non rainy day in south Interior Karnataka to control the pest.
- Undertake inter-cropping with soyabean and pulses of short duration to reduce wooly aphid incidence.
- Continue land preparation and sowing of *rabi* jowar, wheat and maize.

Andhra Pradesh

Rain occurred at a few places over Rayalaseema on 8th October and isolated over Coastal Andhra Pradesh from 5 to 7th October, from 9 to 11th October, over Telangana from 5 to 8th October, over Rayalaseema from 5 to 7th & 9th October. Mainly dry or dry weather prevailed elsewhere over the State.

Isolated rain or thundershowers are likely over Coastal AP and Rayalaseema. Mainly dry weather is likely to prevail over Telangana

Advisories

- There was no significant rainfall in the state during last week and rain / thundershowers likely to occur at isolated places over Coastal AP and Rayalaseema. Mainly dry weather is likely to prevail over Telangana. Under the circumstances, apply irrigation to groundnut, chilly and tur to bring the soil moisture to its field capacity.
- Conserve moisture in maize and cotton as the crops are now at maturity stage.
- Attack of stem borer is reported in rice. Spray Quinalfos @ 2.3 ml / liter of water to control the pest.

Eastern Region (Assam, Bihar, Sikkim, West Bengal)

Assam

Light to moderate rain occurred at isolated places on 9th, 10th and 11th with isolated heavy falls on 10th and heavy to very heavy falls on 11th October over the State.

Rain / thundershowers are likely at isolated places over the State.

- As there was no significant rainfall in the State except in Golghat and Tinsukia districts during last week and rain / thundershowers will occur at isolated places over the State for the next three days, apply irrigation to arhar, black gram and green gram to bring the soil moisture to its field capacity. Apply irrigation depending on the soil profile stored moisture in Golghat and Tinsukia as excess rainfall is received during last week.
- Maintain 3-5 cm water level in *Sali* rice field.
- Mild incidence of aphids, jassids, flea beetle and leaf spot in black gram and green gram is reported.
- Monitor Pod and apion borer in arhar and if crosses economic threshold level, spray Malathion 50 EC @ 1.5 ml per litre of water or Fenitrothion 50 E.C. @ 2ml per litre of water after current spells of rain.
- Monitor Aphids, Jassids, Flea beetles in black gram and green gram and if crosses economic threshold level, spray Malathion 50 EC @ 2ml per litre of water. For leaf spot, as soon as diseases appear, spray Blitox or Fitolan @ 1.5 gram per litre of water at an interval of 7 to 10 days. Alternatively Bavistin @ 1 gram per litre of water should be applied at an interval of 12 to 15 days.
- Apply plant protection measures to *sali* rice when one adult of rice hispa per hill or one leaf is found damaged by hispa. Apply Monocrotophos 40 EC @ 1.5 ml per litre of water or Chloropyriphos 20 EC @ 2 ml per litre of water to control the insect. If attack of Stem borer is noticed apply Monocrotophos 40 EC @ 1.5 ml per litre of water.

• Continue land preparation and sowing of early winter vegetables.

West Bengal

The South West Monsoon withdrew from the districts of Sub Himalayan West Bengal (SHWB) on 9th. Rain occurred at isolated places over the districts of Gangetic West Bengal (GWB) on 9th and 11th October. Weather remained dry elsewhere during rest period.

Rain / thunder showers will occur at isolated places over coastal West Bengal. Mainly dry weather is likely over rest of the State.

Advisories

- As there was no significant rainfall in the State except in Malda district during last week and rain / thundershowers will occur at isolated places over coastal West Bengal and mainly dry weather is likely over rest of the State for the next three days, apply irrigation to sugarcane and groundnut to bring the soil moisture to its field capacity to the crop. Apply irrigation depending on the soil profile stored moisture in Malda as excess rainfall is received during last week.
- Maintain 5 7 cm water in *aman* rice field.
- Continue harvesting of green gram and *aus* rice on bright sunny days.
- Field preparation for sowing of lentil and gram may be done. Use improved varities like Mahamaya 1 and 2, Anuradha (39-2) etc. for gram.

Bihar

Rain occurred at a few places on 5th & 6th October. Rest days rain occurred at isolated places.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall except Darbhanga and Muzaffarpur districts during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in vegetables, and maize crops. Apply irrigation depending on the soil profile stored moisture in the above districts.
- Weeding and intercultural operations may done in rice and apply 25-30 kg / ha Nitrogen as top dressing.
- Continue field preparation and sowing of *rabi* crops with available residual moisture.

Jharkhand

Weather remained dry.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall during last week and mainly dry weather is likely over the State for next three days. Under the circumstances, apply required irrigation to bring the soil moisture to field capacity in vegetables, maize, and other crops.
- Maintain 5-7cm of standing water in the rice field.
- Continue field preparation, sowing / transplanting of tomato, cabbage, cauliflower, brinjal, chilli, potato and pea.

Sikkim

Sky remained generally cloudy during the period. Very light rain occurred at a few places on 11th October over East Sikkim. Rainfall was scanty during the period.

Mainly dry weather is likely to occur over the State.

Advisories

- As there was no significant rainfall in the state during last week and dry weather is likely to prevail over the State for next three days, apply required irrigation to rice and vegetables to bring the soil moisture to its field capacity.
- Continue intercultural operations, application of fertilizers and pesticides in orange, vegetables and ginger.
- If caterpillar infestation is seen in large cardamom, it may be handpicked and destroyed. Rouging of Chirkey and foorkey affected plants may be done at regular intervals and destroyed by burning.
- Maintain water level of 3-5 cm in rice field.
- Monitor orange for trunk borer and plug the holes in case of damage. Also monitor orange for fruit fly. Keep bait made of 20 ml Malathion and 200 g molasses or gur in 2 litres of water to control fruit fly and prevent fruit drop.

Arunachal Pradesh

Sky remained mainly cloudy on 10th and 11th October and weather remained mainly dry on 9th October over the State. Rain / thundershower occurred at a few places on 11th October and one or two places on 10th October.

Rain / thundershower are likely to occur at isolated places over the State.

Advisories

- There was no significant rain except Lohit and Tirap districts and rain / thundershowers are likely to occur at isolated places in the State for the next three days. Under these conditions, apply irrigation to bring the soil moisture to field capacity to new crop of ginger. Apply irrigation depending on the spoil profile stored moisture in the above mentioned districts.
- Drain out the water 15 days before harvesting from rice field and continue harvesting of matured crop.
- Field preparation and sowing of winter vegetables, potato, wheat and mustard may be continued.

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

Gujarat

SW monsoon was withdrawn from entire Gujarat State on 9th October.

Weather will be mainly dry over the State.

- As there was no significant rain in the State except Dangs district during last week and mainly dry weather is likely over the State for next three days, apply irrigation to sugarcane, pre-monsoon irrigated cotton, *Kharif* cotton and castor to bring the soil moisture to field capacity. Apply irrigation depending on the soil profile stored moisture in Dangs districts.
- Maintain 3 5 cm water in rice fields.
- There is possibility of attack of stem borer in *kharif* rice. Monitor the crop for stem borer and if crosses economic threshold level, apply carbofuran 3 % @ 25 kg / ha or cartap hydrochloride 4% @ 20 kg / ha for the control of the insect.
- If population of sucking pests like Aphid, Jassids, Thrips & Heliothis of cotton crosses economic threshold level, release chrysoperla eggs or first in star larvae @ 10000 / ha twice at the interval of 15 days.
- For monitoring & management the boll worms & heliothis of cotton hang 5 pheromance traps in one ha. Change the lures at an interval of 15 days. Destroy trapped moths every day. If boll worm population crosses economic threshold level, release parasite trichogramma @ 1.5 lakhs / ha 5 to 6 times as per requirement depending upon infestation found in field.

- If white fly population crosses economic threshold level in cotton, spray Neem oil @ 4 liter / ha. For control of top shoot borer of cotton spray Endosulphan 35 EC @ 2 liter / ha if population crosses economic threshold level.
- Monitor top shoot borer attack in sugarcane and collect and destroy dead hearts and egg masses. Release *Tricogamma japonicum* @ 1.0 to 1.5 lakh / ha. If attack crosses economic threshold level, apply carbofuran G @ 33 kg / ha or phorate 10 G @ 10 kg / ha in soil.

Chhattisgarh

Monsoon has withdrawn from north Chhattisgarh.

Mainly dry weather is likely over the State.

Advisories

- As there was no significant rainfall in all the districts during last week and mainly dry weather is likely over the State for next three days, apply irrigation to Sugarcane, green gram, black gram, red gram, soybean, groundnut and vegetables to bring the soil to field capacity.
- Maintain 5 7 cm water in rice field.
- Continue preparation of nursery for vegetables like tomato, chilly, brinjal etc. on the bed of 6-8 inch height.
- Monitor the crop for the attack of stem borer in rice. Monitor the crops and if crosses economic threshold level, thimet 10 G @ 10 kg / ha or carbofuran 3 G @ 25 kg / ha may be applied.

Maharashtra

Rainfall occurred at most places in South Konkan, at many places in South Madhya Maharashtra, at a few places in North Konkan & at isolated places in North Madhya Maharashtra & Marathwada. Mainly dry weather prevailed over Vidarbha.

Rain/thundershowers are likely at a few places over Konkan & Goa; at isolated places over Madhya Maharashtra and mainly dry weather is likely over Marathawada and Vidarbha.

- As rain/thundershowers are likely at isolated places over Madhya Maharashtra and mainly dry weather is likely over Marathawada and Vidarbha for next three days, apply irrigation to Sugarcane, Jowar, soybean, *kharif* cotton, tur and Cotton (irrigated) crops.
- Mild incidence of White Woolly Aphids in Aurangabad, Latur, Kohlapur and Pune and Pyrilla, White fly and Mealy bug in Nashik in sugarcane, Army worm, Aphids, Brown Jassids, Rice hispa, Blue beetle in Kolhapur division and Sap sucking insects, Aphids and Jassids in Latur and Hispa, Midge fly in Nagpur division in *Kharif* rice, Stem borer, aphids and jassids in Kohlapur div. and shoot fly in Amraoti div. in jowar, Aphids and Jassids in Aurangabad and Vidarbha div, Sap sucking insects in Aurangabad and Latur div. and Boll worm in Latur div. in irrigated cotton and Aphids and Jassids in Aurangabad and Vidarbha division in *kharif* cotton, is reported.
- Monitor White Woolly Aphids in sugarcane and if crosses economic threshold level, release 2500 eggs or larvae of *Krisoperla Karnea* or *Konobatra Aphidivora* parasite on the leaves or spray Endosulphan @ 500 ml plus Metasistox 1000 ml and 500 ml sticker or 1 kg detergent powder mixed in 500 liter water / ha.
- Monitor infested plants by Hispa in rice & if exceeds economic threshold level, spray Copper oxychloride 50 % @ 1250 gm or Zyneb 75 % @ 1000 gm in 500 liter water.
- Monitor infested plants by Midge fly in rice & if exceeds economic threshold level, 10 % granular Phorate / ha may be mixed in the soil.
- Monitor the stem borer, aphids and jassids population in jowar and if crosses economic threshold level, spray 5 % Neem seed extract or 35 % endosulphon @ 14 ml or 30 % dimethoate @ 10 ml plus 10 ml sticker in 10 liter water.
- Monitor Shoot fly in jowar & if exceeds economic threshold level, spray 35 % Endosulphon @ 350 ml /

ha in 250 liter water.

- Monitor aphids and jassids population in cotton and if crosses economic threshold level, spray methyl dimeton 25EC @ 320 ml or dimethoate 30EC @ 500 ml / ha in 500 liter water.
- Monitor Boll worm in cotton and if exceeds economic threshold level, spray 36 % Monocrotophos WSC or 35 % Endosulphan WSC @ 850 ml / ha in 500 liter water.
- Field preparation and sowing of *rabi* maize, sunflower, safflower, wheat, gram and jowar may be started.
- Select varieties like Hybrid varieties CSHR-13 (R), 15 (R), & 19 (R) and improved varieties Maldandi, Fule-yashoda & Mauli for *rabi* jowar, Girana, Sharada & Bhima for Safflower, HD 2189, 2278, 2380, DWR 162, MACS 2496, Tryambak, Godawari for irrigated wheat and Bansi N-59, sarbati N-8223, N-5749, NI5439 & Panchwati for non irrigated wheat, Vikas, Fule-G 12 (70 kg seeds), Vishwas, Vijay (85 kg seeds) & Vishal, Virat (100 kg seeds) / ha for gram, early varieties like Deccan Hybrid 1, 109, Pusa Sankar 1 & 2, Panchganga, Medium varieties like DMH-107, KH-9491, Manjiri, Karvir & Late varieties like Ganga 11, Deccan 105, Dhaval, African toll for *rabi* maize and Morden, SS-56, BSS-11, APSH-11 *rabi* sunflower.

Madhya Pradesh

South West Monsoon has withdrawn further from remaining parts of the State by 9th October. Dry weather prevailed over the State.

Mainly dry weather is likely over the State.

Advisories

- There was no significant rainfall during last week and mainly dry weather is likely over the State for the next three days. Under the circumstance, apply irrigation to sugarcane crop to bring the soil moisture to field capacity. Maintain 3-5 cm water level in *Kharif* rice field. To protect *Kharif* rice crop from Blastdisease spray Mancozeb @ 1 kg per hactare.
- Conserve moisture wherever the *kharif* crops are at maturity stage.
- Continue harvesting of matured crops.

Orissa

Rainfall occurred at isolated places over the State on 9th & 11th October, and weather was mainly dry on 10th October.

Isolated rain / thundershowers are likely over the State.

- There was no significant rainfall in the State during last week and rain / thundershowers are likely to occur at isolated places over the State for next 3 days. Under the circumstances, apply irrigation to vegetables, sugarcane, ground nut and pulses crops.
- Maintain 5 7 cm water in the rice field.
- There are reports of arhar crop (at flowering stage) infested by blister beetle. Collect the adults and kill them by kerosine water or detergent solution.
- To manage the Epilachua beetle in Brinjal spray Carbyl @ 4gm / litre of water. To manage the Bacterial Wilt in vegetables spray Streptocycline @ 1gm / litre of water.
- To manage the Mealy bug, scale insects, white fly and inter node borer in sugarcane spray Endosulfan / Monocrotophos / Malathion @ 2 ml. per litre of water.
- Field preparation and sowing of *rabi* groundnut may be done.



Salient weather features for the week ending 11/10/06

WITHDRAWAL OF SOUTHWEST MONSOON

The southwest monsoon further withdrew on 9th from the remaining parts of East Uttar Pradesh, Madhya Pradesh & Gujarat, entire Bihar & Sub-Himalayan West Bengal & Sikkim, most parts of Jharkhand & northern parts of Gangetic West Bengal, Chhattisgarh & Maharashtra. The withdrawal line passed through Cooch Behar, Bankura, Durg, Akola and Dahanu.

METEOROLOGICAL ANALYSIS

- Last week's upper air cyclonic circulation extending upto mid-tropospheric levels over south Konkan & Goa and neighbourhood persisted upto 5th and became less marked thereafter.
- A north-south trough extending from northeast to southwest Bay of Bengal with embedded upper air cyclonic circulation one over northeast Bay of Bengal and another over adjoining west central Bay of

Bengal was seen on 7th. The cyclonic circulation over west central Bay of Bengal persisted till 11th, however under the influence of the other upper air cyclonic circulation, a low pressure area formed over east-central & adjoining northeast Bay of Bengal on 9th which persisted over there upto 11th.

• An off shore trough at sea level extending from south Konkan coast to Kerala coast was seen on many days of the week.

RAINFALL

Under the influence of the above systems:

- Fairly widespread rainfall occurred over Konkan & Goa, Coastal Karnataka, Kerala and Andaman & Nicobar Islands on many days of the week with isolated heavy to very heavy falls on some days.
- Fairly widespread rainfall occurred over northeastern states, West Bengal & Sikkim and Orissa in the beginning of the week which decreased subsequently and isolated rainfall was experienced on the remaining days of the week.
- Scattered light to moderate rainfall continued over extreme south peninsula throughout the week.
- Isolated light rainfall occurred over Bihar, Chhattisgarh, Coastal Andhra Pradesh, Marathawada and Madhya Maharashtra on some days of the week.
- Weather remained mainly dry over the rest of the country.

RAINFALL DURING THE WEEK ENDING ON 11TH OCTOBER, 2006

Rainfall was excess/normal in 6, deficient/scanty in 24 and no rain in 6 out of 36 meteorological subdivisions (Actual: 11.2 mm, Normal: 23.7 mm and Departure: -53%).

CUMULATIVE SEASONAL RAINFALL (1st OCTOBER TO 11th OCTOBER, 2006)

Rainfall was excess/normal in 9, deficient/scanty in 24 and no rain in 3 out of 36 meteorological subdivisions (Actual: 21.4 mm, Normal: 40.2 mm and Departure: -47%).

OUTLOOK FOR THE WEEK ENDING ON 18TH OCTOBER, 2006.

- Southwest monsoon is likely to withdraw from northeastern States and remaining parts of east & central India and Maharashtra.
- Scattered rainfall activity likely to continue over extreme south peninsula with possibility to increase over Tamil Nadu & Pondicherry, Kerala and Lakshadweep.













Desert Locust Forecasting



Rainfall (mm)									
Station Name	5.10.06	6.10.06	7.10.06	8.10.06	9.10.06	10.10.06	11.10.06		
Amritsar									
Barmer	7								
Sriganganagar									
Jaisalmer				NIL					
Kota									
Deesa	7								
Churu									

Temperature (degree celcius)								
Station Name	5.10.06	6.10.06	7.10.06	8.10.06	9.10.06	10.10.06	11.10.06	
Amritsar	27.0	26.5	27.0	27.0	28.0	27.5	26.5	
Barmer	31.0	30.0	28.5	-	-	27.5	28.0	
Sriganganagar	31.5	32.0	32.5	31.0	-	29.5	29.5	
Jaisalmer	31.5	31.0	30.5	30.0	29.0	-	28.5	
Kota	33.5	33.0	31.5	-	-	-	31.5	
Deesa	32.5	31.0	30.5	-	29.5	28.5	28.5	
Churu	-	-	-	-	-	-	-	

	Wind													
Station	5.1).06	6.1	0.06	7.1	0.06	8.10).06	9.1	0.06	10.1	0.06	11.	10.06
Name	Speed	Dir.												
Amritsar	07	SW	04	E	-	-	-	-	12	SW	-	-	-	-
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	20	W	15	W	-	-	-	-	-	-	17	w	14	W
Jaisalmer	10	SW	15	WNW	-	-	-	-	11	s	07	SSW	08	SSW
Kota	13	NW	-	-	-	-	-	-	-	-	-	-	-	-
Deesa	-	_	_	-	-	-	-	-	06	SW	-	-	07	W
Churu	25	W	17	W	-	-	-	-	08	W	-	-	15	NW

Although the monsoon rains have finished along the **Indo-Pakistan** border and only scattered adults are present, limited breeding could still occur in Rajasthan and the adjoining areas as heavy rains and flooding occurred last month along the **Indo-Pakistan** border (Rajasthan, **India** and Tharparkar, **Pakistan**).

Farmers are advised to monitor locust population and carry out anti locust operations, if the population of the pest crosses Economic Threshold Level (ETL).

CROP – STATE – STAGE

		Delhi		
Toria	Vegetables (Brinjal, Chilly, Cauliflower and cabbage, raddish, carrot,and turnip	Arhar	Rice	Green gram, black gram
Sowing	Nursery sowing/ Transplanting	Maturity / harvesting	Grain formation / maturity	Maturity/harvesting
Bajra	Fodder (Mixed maize , Lobia)	Maize	Early sown vegetable crops	Mustard
Grain formation / maturity	Vegetative	Maturity	Vegetative/ flowering/ fruiting/ harvesting	Sowing
Berseem				
Sowing				
		Haryana		
Horticultural	New Horticultural			G #

Horticultural crop	New Horticultural crop	Paddy	Maize	Cotton		
Fruiting	Planting	Grain maturity / early harvesting	Cob maturity / harvesting	Boll development / maturity		
Bajra	Groundnut	Kharif pulses	Sugarcane	Gram / Wheat		
Ear head harvesting	Pod maturity / early harvesting	Pod harvesting	Vegetative	Sowing		
Himachal Pradesh						

Rice	Maize	Apple	Summer vegetables (Tomato, brinjal, ladies finger)	Fodder crops
Grain maturity / Harvesting	cob maturity / harvesting	Harvesting	Vegetative/flowering / fruiting / harvesting	Vegetative
Moong / Mash	Fruit plants	Potato	Summer vegetables Radish, Turnip, Carrot	Summer vegetables (Cauliflower, Cabbage)/Arcle peas
Harvesting	New growth	Tuber maturity / harvesting	Sowing	Preparation of nursery in low hills & Transplanting in

				high hills / Sowing
Vegetables		Jammu & Kashmir		
crops	Rice	Maize	Kharif crops	Horticultural crops
Harvesting	Grain development	Maturity / harvesting	Grain maturity	Vegetative
Fodder crops (Maize, Bajra, MP Chari)	Flower crops	Toria	Brown Sarson	Lentil
Vegetative/cutti ng	Seed bed preparation for sowing	Sowing	Sowing	Sowing
Wheat				
Sowing		Punjab		
Sugarcane	Paddy	Maize	Cotton	Kharif pulses
Vegetative	Grain maturity / early harvesting	Cob maturity / early harvesting	Boll development / maturity	Pod harvesting
Groundnut Pod maturity / early harvesting				
earry narvesting		Rajasthan		
Cotton	Groundnut	Bajra	Pulses	Soyabean
Boll maturity	Pod maturity	Harvesting	Pod maturity / harvesting	Pod maturity
Maize	Mustard			
Harvesting	Land preparation / sowing			
		Uttar Pradesh		
Kharif Pulses (Urad & Moong)	Sugarcane	Kharif Vegetables	Winter Vegetables	
Pod development / maturity / harvesting	Cane formation / maturity / harvesting	Harvesting	Transplanting	
Mango	<i>Kharif</i> Maize, Jowar, Bajra	Kharif rice	Toria	Kharif Oilseeds
Harvesting	Grain development / maturity / harvesting	Grain formation / maturity	Sowing	Seed formation / maturity / harvesting
New Mango	Toria			
Active growth	Seedling	Uttaranchal		
Rice	Mango/Litchi	Apple	Sugarcane	Toria
Dough /	Seedling	Maturity	Grand growth	Sowing
maturity	Millets (Ragi)	Pea & Potato	Giuna growan	Sowing
	Maturity	Sowing		
		Assam		
Maize	Sugarcane	Early winter vegetables	Vegetables	Balck gram and Green gram
Harvesting	Cane maturity / harvesting	sowing	Land preparation / sowing	Vegetative
Sali rice Vegetative /	Arhar Vegetative /			
tillering	flowering	Arunachal Pradesh		
Wet seeded rice	Ginger	Potato	Wheat and Mustard	Winter vegetables
Maturity / harvesting	Vegetative	Land preparation / sowing	Land preparation / sowing	Nursery sowing / transplanting
E		Bihar		
Fruits and Vegetables	Winter vegetables	Rice	Maize	Rabi Maize
Vegetative	Sowing / transplanting	Flowering / grain formation	Cob formation	Field preparation / sowing

Pulses and Oil seeds	Potato		Rabi Oil seeds Sarson, Lin		Rabi Pulses (Lentil, Gram, Pea)		
Seed maturity	Field preparation / sowing		Field preparation	n / sowing	Field preparation / sowing		
-			Jhark	khand			
Rice		(grou	land crops ndnut, urad)	Finger millet		Maize	
Grain format			g / pod formation maturity	grain forn	nation / maturity	Cob	formation / maturity
<i>Rabi</i> vegetab (Tomato, Cabl Cauliflower, B Chilli)	bage,	ve	planted <i>kharif</i> egetables	Timely sown Arhar			Pea & Tomato
Transplantir	ng	-	vegetative / egetative		y / harvesting		Sowing
0		•	Sik				<u></u>
Orange Fruit harvesting		ice ormation	Large Carda		Rabi vegetab Transplantin		Ginger
Fruit narvesting	Grain I	ormation	Harvesti West I	-	Transplanting	g	Harvesting
Aus rice	Suga	rcane	Jute	Deligai	Green Gran	n	Aman rice
Harvesting		etative	Harvesti	ng	Pod maturity harvesting		Panicle initiation / flowering / grain formation
Groundnut	-	ntil	Gram				
Pod formation		paration / ving	Field preparation	-			
~			Chatt	isgarh			
Chilly, Brinjal, Ladies finger, Beans, Bottle gourd	Niger, Kulthi		Sugarcane		<i>Kharif</i> rice		Soybean
Vegetative / flowering / fruiting / harvesing	sowing		Vegetati	ve	panicle initiation / flowering / grain formation		Pod formation / maturity
Blackgram / Greengram	Grou	ndnut	Red Gram		Tomato, chil brinjal	li,	
Pod formation / maturity	Pod fo	rmation	Pod formation / maturity		Nursery preparation / transplanting		
	[Guj	arat	Γ		
Kharif Maize	irrigate	onsoon d Cotton	Kharif grou	Indnut	Early Sown Ri	ce	Sugarcane
Cob maturity / harvesting	mat	rmation / urity	Pod maturity / h		Early tillering/tillering		Cane development
Kharif Cotton	Ca	stor	Kharif ba	ajra	Kharif Rice		Mustard
Vegetative/ square / boll formation	Vege	etative	Grin maturity / ł	narvesting	Panicle initiation / flowering / grain formation		Land preparation / sowing
			Mahar	ashtra	·		
Kharif Groundnut (Madhya Maharashtra, Marathwada & Vidarbha)	(Ma Mahai Marath Vida	'ur dhya rashtra, wada & rbha)	Irrigate Cotton	1	Sugarcane (Seasonal) (Madhya Mahrashtra Marthwada a Vidarbha)	nd	Bajra (Madhya Mahrashtra, Marthwada and Vidarbha)
Pod maturity / harvesting		g / flower rmation	Active vegetativ formation / boll		Active vegetati elongation	ve /	grain maturity/ harvesting
Jowar (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif s (Ma Mahar Marath	sunflower dhya rashtra, wada & rbha)	Soyabea (Madhya Maha Marathwaa Vidarbh	nn arashtra, da &	ra, Kharif rice (Konkan)		Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Flowering / grain formation / grain maturity		naturity / esting	Pod maturity / h Late sown crops formation s	are at pod	Panicle initiatio flowering (late varieties Flowering / gra formation	5)	Flag leaf initiation (in Vidarbha) Flowering / grain formation (in Madhya

				(medium varieties) Grain formation / grain maturity (early maturing)	Maharashtra, Marathwada)	
Moong (Madhya Maharashtra, Marathwada & Vidarbha)	Kharif cotton (Madhya Maharashtra, Marathwada & Vidarbha)	<i>Rabi</i> Jowar (Madhya Maharashtra, Marathwada & Vidarbha)		<i>Rabi</i> Sunflower (Madhya Maharashtra, Marathwada & Vidarbha)	Wheat (Madhya Maharashtra, Marathwada & Vidarbha)	
Harvesting	Active vegetative / square formation	Fie	eld preparation / sowing	Field preparation / sowing	Field preparation / sowing	
<i>Rabi</i> gram (Madhya Maharashtra, Marathwada & Vidarbha)	<i>Rabi</i> maize (Madhya Maharashtra, Marathwada & Vidarbha)	<i>Rabi</i> Safflower (Madhya Maharashtra, Marathwada & Vidarbha)				
Field preparation / sowing	Field preparation / sowing	Fie	eld preparation / sowing			
			Madhya Pradesh	- -		
Sugarcane	Moong		Kharif crops (Jowar, urad, tur)	Kharif Soyabean	Kharif rice	
Vegetative	Harvesting		pod formation/ grain maturity / harvesting	Harvesting	Grain formation	
Maize Cob maturity	Cotton Boll maturity					
			Orissa			
Vegetables	Earlier sown vegetables	Early sown Groundnut		Rabi Groundnut	Sugarcane	
Sowing / transplanting	Flowering / fruiting / harvesting	Early vegetative / vegetative/ pod development		Sowing	Vegetative / tillering	
Kharif rice	Early transplanted rice	Pulses		Early sown Pulses		
Tillering / panicle initiation	Early tillering / tillering / panicle initiation	Sowing (Biri / Mung / Kulthi)		Vegetative / flowering / pod maturity		
			Andhra Pradesh			
Kharif rice	Kharif crops(Chillies Chillies/ Tur)	š/	Maize	Groundnut	Cotton	
Panicle initiation flowering	/ Pod formation	1	Cob maturity	Pod formation	Boll maturity	
			Karnataka			
Groundnut	Sugarcane (Rat crop & new cro		Kharif crops (jowar, maize)	Kharif rice	Kharif cotton	
Pod development / maturity	Grand growth	1	Maturity	Tillering / panicle initiation	Boll formation / maturity	
<i>Rabi</i> jowar, whea and maize	and malze(Ear sown)	·ly				
Land preparation and sowing						
			Kerala			
Rubber	Virippu Rice		Pepper			
Tapping	Harvesting		Berry development /maturity			
Pulses (Black gra	m		Tamil Nadu Summer irrigated	Early & mid		
and green gram			cotton	sugarcane	Groundnut	
Pod maturity / ear harvesting		1	Harvesting	Grand growth	Pod maturity / early harvesting	
Rice (Kuruvai)	Rice (Samba)					
Flowering	Land preparatio sowing	n /				