



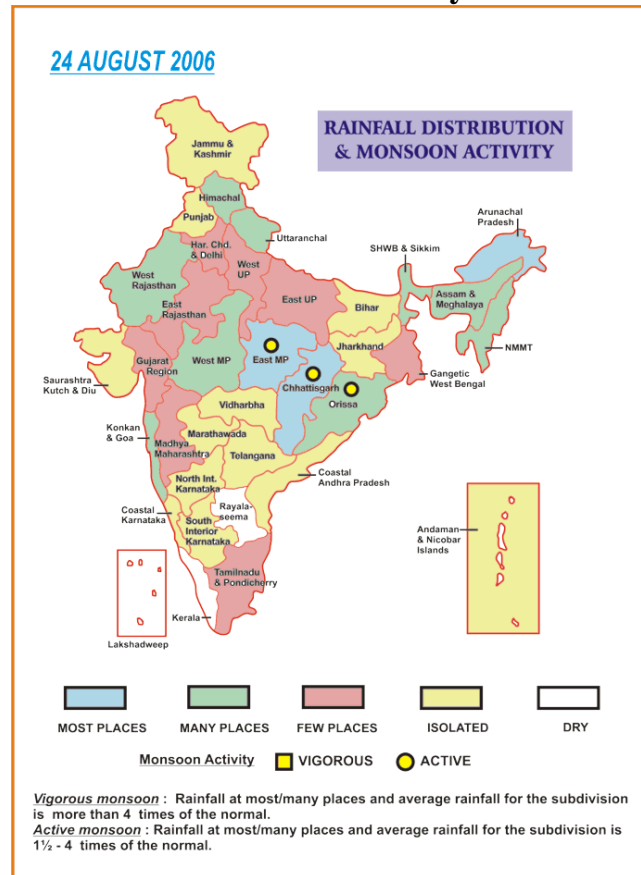
Summary of Agromet Advisory Services for different States of the country
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(For the period 24th to 28th August, 2006)

The extended version of the bulletin is also available at <http://imdagrmet.org>

Monsoon Activity



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

Punjab & Haryana

Rain / thundershowers occurred at a few places on 23rd August in Punjab, at isolated places on 22nd August in Punjab and on 22nd and 23rd August in Haryana. Rain also occurred at a few places on 21st August in Punjab. Weather remained mainly dry on 21st August in Haryana.

Rain / thundershower is likely at isolated places over the States.

Advisories

- Current weather patterns do not signal any significant improvement / change in ongoing subdued / weak monsoon conditions for next 3 days. Only isolated to scattered rainfall with poor spatial / temporal distribution is anticipated with districts close to foothill may have enhanced rainfall activities.

- In view of this farmers are advised to utilize available water resources to save already transplanted / sown *kharif* crops against moisture stress.
- It is also suggested to conduct weeding and apply mulch or soil mulch for better utilisation of soil moisture / nutrient by the crop.
- As high humid and cloudy conditions are prevailing, they may favour infestation and further spread of sucking pests / diseases in standing *kharif* crops. Monitor the pests and diseases on crops and adequate chemical / mechanical measures may be taken to control them.
- Due to prevailing weather conditions in north and north western belt there are chances of migration of locusts from Indo-Pakistan border (Kargil and Leh). Farmers are advised to monitor the locust population and carry out antilocus operations i.e. spraying of pesticides on standing crops and vegetation to control the damage from any possible locust invasion.
- Maintain 3-5 cm water level in rice field.

Rajasthan

Moderate to heavy rainfall at many places in Jodhpur division, light to moderate rainfall at a few places in Ajmer, Kota and Udaipur divisions, at isolated places in Jaipur and Bikaner divisions are reported.

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

Advisories

- As there was excess rain in the State during last week and rain / thundershowers are likely at a few places over the State, apply irrigation to **cotton, pulses, jowar, maize, soybean and groundnut** crops depending on soil profile stored moisture.
- Undertake intercultural operation on non-rainy days.

Uttar Pradesh

Rain occurred at a few places in **Gorakhpur, Varanasi, Faizabad and Allahabad** divisions on 21st August and in **Allahabad and Lucknow** divisions on 22nd August. Rain occurred at many places in **Gorakhpur, Faizabad and Varanasi** divisions on 22nd August. Weather was mainly dry in remaining divisions of the State on 21st and 22nd August. Monsoon has been active over East U.P. and rain occurred at many places in **Gorakhpur and Jhansi** divisions and at a few places in remaining divisions of the State on 23rd August.

Rain / thundershowers are likely at many places over East U.P. and at a few places over West U.P.

Advisories

- Rain or thundershowers are likely at many places in East UP and at a few places over West UP for the next three days. Under the circumstance, postpone irrigation to **summer sugarcane, vegetables and mango** crops in East UP. Apply required irrigation to the crops in West UP.
- Weeding and hoeing along with topdressing of nitrogen may be carried out in **rice, maize, jowar, bajra, kharif pulses, vegetables and oilseeds** in West UP on a non rainy day and after current spells of rain in East UP.
- Start the land preparation on a non-rainy day and sowing of **toria**.
- Monitor the crop and collect and destroy egg masses of **pyrilla** from the lower surface of the leaves of **sugarcane**. Spray malathion or endosulfan @ 1.25 litre / ha in West UP on a non rainy day and after current spells of rain in East UP to control the **pyrilla** if the population exceeds E.T.L. To control the white grub dip the small branches of Neem and Peepal around the field to catch and collect insects and spray solutions of 0.5% monocrotophos in West UP on a non rainy day and after current spells of rain in East UP.
- Continue scattering of malathion 5% dust @ 20-25 kg / ha to save **jayad vegetables** from **red insects** in west UP on a non rainy day and after current spell of rain in East UP.
- To overcome **shoot gall maker** in **mango** trees, spray twice with dimethoate 1.5 ml / litre of water on a non-rainy day at the interval of 15 days.

- In transplanted paddy, if top dressing of urea has not been done and to control *khaira* disease, spray the solution of 5 kg Zinc Sulphate and 20 kg urea dissolving in 800-1000 litres water per hectare in West UP on a non rainy day and after current spells of rain in East UP.

Himachal Pradesh

Precipitation occurred at a few places during this week in the State.

Rain / thundershower is likely at a few places over the State.

Advisories

- As there was excess rain in Una district during last week and rain / thundershowers are likely at a few places over the State for next three days, apply irrigation to maize, moong, potato and early sown vegetable crops in this district depending on soil moisture status.
- As there was no significant rain in remaining districts of the State, apply irrigation to the crops in these districts.
- Maintain 3 – 5 cm water in rice field.
- Apply second dose of N fertilizer @ 25 – 30 kg / ha on a non-rainy day at 40 – 45 days after transplanting as top dressing to rice.
- If spots are noticed on the leaves of Simla-mirch, Ridomil-MZ (0.25%) may be sprayed after an interval of 8 –10 days.
- Weather is conducive for attack of tomato borer. For control Endosulphan @ 0.07% may be sprayed and picking should be done after 3-4 days of spray.
- Fruit and shoot borer attack is seen in brinjal. For control spray fenbalerate or cypermethrin @ 0.01%.
- Weather is conducive for rice blast and rice hispa attack. If blast is noticed, Blitox 50 (Copper oxychloride) @ 2.25 kg or Bavistin 50 WP @ 750 g or Hinosan @ 750 ml in 750 litre water / ha may be applied. If rice hispa is noticed, metacid 50 EC @ 1 ml per litre of water may be applied. Use sticker Stickwel @ 0.2 g / litre water.
- Apply chemicals on a non-rainy day.

Uttaranchal

Light to moderate rain was recorded at many places on 23rd August, at a few places on 20th August, while weather remained mainly dry during rest of the period. Sky remained partly to generally cloudy.

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

Advisories

- Light to moderate rain was recorded at many places in the State during last week. Rain / thunder showers are likely at a few places over the State for next three days and Nainital, Garhwal Pauri and Udham Sing Nagar received scanty rain during last three weeks. Under the circumstances apply irrigation to mango, apple, sugarcane and vegetable crops in these districts depending on soil stored moisture.
- Continue transplanting / sowing of rice & cauliflower.

Jammu & Kashmir

Light to moderate rain / thundershowers occurred at many places with heavy falls at isolated falls on 21st August. Light to moderate rain again occurred at a few and isolated places on 22nd and 23rd August respectively with heavy falls at Katra on 23rd August over J & K State.

Rain / thundershowers likely to occur at isolated places over J & K State.

Advisories

- Weather conditions are favourable for breeding and migration of desert locust. Undertake anti-locust

operations immediately to prevent crop damage.

- Light to moderate rain occurred at many places in J&K State during last week. Rain / thundershowers are likely to occur at isolated places in J & K State for the next three days. Under the circumstances, apply irrigation to **vegetables, pulses, rice and maize** depending on the soil profile stored moisture.
- Weather conditions are favourable for the occurrence of **yellow vein mosaic** in **bhindi** crop. Monitor the crop and rogue out the affected plants to prevent further spread of the disease.
- Attack of **mosaic disease** is reported in **pulses**. Monitor continuously for the diseases as the weather conditions are favourable for further spread. Rouge out infected plants and destroy completely. Also monitor the crop for **hairy caterpillar** due to prevailing weather conditions. If it crosses economic threshold level, spray Endosulfan @ 0.07% to control the pest.
- Continue sowing of **carrot, beet root and turnip** for seed crop by utilizing the monsoon showers.
- Planting of horticultural crops like **mango, citrus, litchi, loquat, guava, papaya** etc. may be continued by utilizing the monsoon showers.

Delhi

Light rain occurred on 23rd August at isolated places. Weather remained mainly dry on rest of the days.

Rain / thundershower is likely at isolated places over the State.

Advisories

- As there was no significant rain during last few weeks and rain / thundershowers are likely at isolated places over the State for next three days, apply irrigation to **early sown kharif vegetable crops, green gram, black gram, fodder crops, arhar, maize and bajra**.
- Drain out water from the field and apply second split dose of N @ 25 – 30 kg / ha after 40 - 45 days of transplanting of **rice** as top dressing. Maintain 3 – 5 cm water level in rice field after 2 – 3 days of fertilizer application.
- Prepare land and continue transplanting of 4 – 6 weeks old early varieties of **cauliflower** and **cabbage** plants. Also prepare nursery for medium varieties of **cauliflower** and **cabbage**.
- Prepare land and perform early sowing of Pusa Reshmi variety of **Raddish**.

Southern Region (AP, Tamilnadu, Karnataka and Kerala)

Kerala

Southwest monsoon was weak over the State on 21st, 22nd & 23rd August. Rain occurred at a few places on 21st and at isolated places on 22nd & 23rd August.

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

Advisories

- Attack of pests and diseases is reported in different crops in Kerala. Monitor the crops continuously as the weather conditions are favourable for further spread.
- Attack of **rice bug** is reported. Spray Malathion @ 1 litre / ha or Methyl parathion @ 500 ml / ha to control **rice bug** wherever the crop is at grain filling stage.
- Attack of **spindle bug, bud rot and fruit rot (Mahali) diseases** is reported in **arcanut**. Spray the crowns with Carbaryl 50% WP @ 20 gm / 100 litres of water to control the bug. Continue spraying of bordeaux mixture 1% to control the diseases.
- Attack of **Sigatoka leaf spot, bunchy top and pseudo stem weevil** is reported in **banana**. Spray 1 % Bordeaux mixture to control **leaf spot**. Eradicate **bunchy top** affected plants to reduce the spread of the disease. Fill the leaf axils with chlorophyriphos @ 2.5 ml / litre of water to control **pseudo stem weevil**.
- Attack of **Leaf gall and thrips** is reported in **pepper**. Spray Monocrotophos or Dimethoate @ 0.05 %

to control the pests.

- Attack of mahali disease, coried bug and red palm weevil is reported in coconut. Spray blitox @ 4 g / litre / palm to control mahali disease. Spray entire crown of the young bunches with Carbaryl @ 2 gm/ litre of water excluding leaves and older bunches. Spraying may be avoided to the receptive phase of the female flowers. Apply neem cake @ 5 kg/ palm to control coried bug. Use Pheromone trap after current spells of rainfall for controlling red palm weevil.
- There was no significant rainfall over the State during last week and rainfall is likely to occur at isolated places in the State for the next three days. Under the circumstance, apply required irrigation to plantation crops and pepper to bring the soil moisture to its field capacity.
- Continue intercropping operations and fertilizer application in arecanut, pepper, rubber and banana.

Tamilnadu

Rainfall occurred at many places on 21st August, at a few places on 22nd August and at isolated places over the State on 23rd August.

Rain / thundershowers likely at isolated places over the State.

Advisories

- There was excess / normal rainfall in the State during last week except in Chennai, Cuddalore, Kanchipuram, Kanyakumari, Nilgiris, Thanjavur, Thirunelveli, Thiruvarur and Thiruvallur districts and rain / thundershowers are likely to occur at isolated places over the State for the next three days. Under the circumstances, apply irrigation to cotton, early / mid sugarcane and millets depending on soil profile stored moisture. Apply required irrigation in the above mentioned districts to bring the soil moisture to its field capacity.
- Stem borer egg masses and thrips have been reported in nursery rice. Collect and destroy egg masses as a preventive measure. Monitor the crop continuously for the pest as the weather conditions are favourable for further spread. Spray Dimecron @ 0.5 ml / litre of water to control thrips.
- Attack of internode borer is reported in mid season sugarcane. Monitor the crops continuously as the weather conditions are favourable for further spread. Release egg parasites viz., *Trichogramma chilonis* @ 5 cc / ha to control the pest.
- Weather conditions are favourable for the attack of red hairy caterpillar in groundnut. Monitor the crop for the pest and collect and destroy egg masses to prevent further spread of the pest.

Karnataka

Monsoon was weak on all the days over Coastal Karnataka and North Interior Karnataka. It was weak on 22nd & 23rd August over South Interior Karnataka. Rainfall occurred at many places on 21st August and at a few places on 22nd & 23rd August over Coastal Karnataka. Over North Interior Karnataka, rainfall occurred at isolated places on all the days. Over South Interior Karnataka, rainfall occurred at a few places on 21st August and at isolated places on 22nd & 23rd August.

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

Advisories

- Apply required irrigation and top dressing of Nitrogen in sugarcane, maize and jowar as rain / thundershowers are likely to occur at isolated places. Apply life saving irrigation immediately to maize crops under moisture stress.
- Farmers are advised to continue sowing of kharif rice by utilizing the monsoon showers.
- Monitor the incidences of aphids on cotton. Spray Phosphomidon @ 200 ml / ha or Dimethoate @ 600 ml / ha if there is attack of aphids / sucking pests in cotton.

Andhra Pradesh

Rain occurred at many places over Coastal Andhra Pradesh on 17th & 22nd August, over Telangana on 17th August and at a few places over Coastal Andhra Pradesh on 20th, 21st & 23rd August, over Rayalaseema from 20th to 22nd August. Isolated rain occurred elsewhere over the State during the week.

Rain / thundershowers are likely to occur at a few places over north Coastal Andhra Pradesh and isolated over south Coastal Andhra Pradesh, Telangana and Rayalaseema.

Advisories

- There was no significant rainfall in all the districts except **Nellore** and **Prakasam** in **Coastal AP** and **Chittoor** and **Cuddappah** in **Rayalaseema** and rain / thunder showers likely to occur at a few places over north Coastal A.P. and at isolated places over the rest region. Under the circumstances, apply required irrigation to **maize**, **groundnut**, **cotton**, **chilly** and **tur** crops. Apply irrigation depending upon soil profile stored moisture in the above mentioned districts.
- Undertake intercultural operations, application of fertilizers and pesticides over south Coastal A.P, Rayalaseema and Telangana and on a non rainy day over north Coastal A.P.
- **Stem borer** incidence is noticed in **maize**. Monitor the crop continuously as the weather conditions are favourable for further spread. To control the pest, spray Endosulfan @ 2ml / litre of water on a non rainy day in north Coastal AP to control the pest. Continue spraying in the rest region.
- **Bud and stem necrosis** disease is reported in **groundnut**. Monitor the crop continuously as the weather conditions are favourable for further spread. Spray Dimethoate @ 400 ml/ha or Methyl Dimeton @ 360 ml/ha on a non rainy day in north Coastal AP to control the vector thereby reducing the spread of disease. Continue spraying in the rest region to control the vector.

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

Assam

Light to moderate rain occurred at many places on 21st & 23rd August and at a few places on 22nd August with isolated heavy falls in all three days over the State. Generally Cloudy sky during the period.

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

Warning: Heavy to very heavy rain is likely to occur at isolated places over the state during next 48 hrs.

Advisories

- Rain / thundershowers are likely at many places over the State for next three days. As there was no significant rainfall for the last five weeks, current spells of rainfall may be utilized for **sugarcane**, **vegetables** and **arhar** to avoid crop damage. Excess water may be stored in the farm pond for further use.
- Maintain 3 – 5 cm water level in **Sali rice** field wherever crops are at tillering stage.
- Infestation of **stem borer** is reported in **sugarcane** in a few localities and weather conditions are favourable for further spread. Apply Phosphomidon @ 1.5 ml per litre of water and 400 – 500 ml per bigha or Endosulfan @ 2 ml per litre of water and 1 – 1.5 litre per bigha after current spells of rain two-three rounds fortnightly starting from the rush of egg laying.
- Continue transplanting of **Sali rice**, if rice seedlings are available.
- **Due to less rainfall around 30% of Sali rice area is yet to be covered.** Where **Sali rice** could not be transplanted, in those areas **Luit** and **Kapili** varieties of rice seeds @ 8 kg per bigha can be sown directly upto 1st week of September. **Black gram** and **green gram** may also be sown in those areas. Undertake sowing operation after current spells of rain.
- Select **Black gram** varieties from T – 9, Pant U-19 and Saonimah (SB-121) and **Green gram** varieties from T-44, Pratap and AAU-39.
- Monitor the crop for **pod** and **Epion borer** in **Arhar** as the weather conditions are favourable for the spread. To control **Pod** and **Epion borer**, if it crosses ETL, Malathion 50 E.C. @ 1.5 ml per litre of water or Fenitrothion 50 E.C. @ 2ml per litre of water should be sprayed after current spells of rain. Also monitor the crop for sucking pests. For control of **Flea beetle**, **leaf roller** and **jassids**, insecticides should be applied after current spells of rain.
- 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 Chloropyrifos 20 EC @ 2 ml per litre of water after current spells of rain to control the insect. If attack of **Stem borer** is noticed apply Monocrotophos.

West Bengal

During the said period South West Monsoon was active over Gangetic West Bengal (GWB) on 22nd and 23rd August and over Sub Himalayan West Bengal (SHWB) on 22nd August, weak over SHWB on 21st and 23rd August. During this period rain occurred at a few places on 21st August, at most places with heavy rain at a few places on 22nd August, at many places on 23rd August over the districts of SHWB.

But during the said period rain occurred at many places with heavy rain at isolated places on 21st August, at most places with heavy rain at isolated places on 22nd August, at most places with heavy to very heavy rain at isolated places on 23rd August over the districts of GWB.

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

Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation to **sugarcane**, **green gram** and **groundnut**.
- Maintain 5 – 7 cm water in the **aus rice** field and **early transplanted aman rice** fields wherever crops are at tillering stage.
- Also postpone intercultural operation and application of fertilizer and plant protection measures to the crops under prevailing weather condition.
- Continue land preparation and transplanting of **aman rice**. Maintain 2 – 3 cm of standing water after 2 – 3 days of transplanting. To stop the spread of weeds apply 2.5 litres of butachlore 50% or 20 Kg butachlore 5% (granule type) per hectare on a non-rainy day within 3 days of transplanting.

Bihar

Light to moderate rain occurred at many places over the State on 20th, 21st & 22nd August. Light rain occurred at isolated places on rest of the days.

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

Warning: Isolated heavy rainfall likely to occur over the State.

Advisories

- As rain / thundershowers are likely at many places over the State for next three days. Under the circumstances, postpone irrigation to **vegetables**, **maize**, **pulses** and **oilseed** crops.
- Undertake drainage of excess water to avoid water logging in case of heavy rainfall.
- Activity of monsoon again started and few good rains also occurred. Under the situation farmers are advised to fill the space by new **rice** seedlings if seedlings have rotten or did not establish in recently transplanted crop and maintain a population of 35-40 hills per sq m.
- Transplanting of photosensitive varieties may be done after current spells of rain, if seedlings are available.

Jharkhand

Rain occurred at many places.

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

Warning: Isolated heavy to very heavy rainfall likely during next 48 hours.

Advisories

- As rain / thundershowers are likely at many places over the State for next three days, postpone irrigation to **vegetables**, **maize**, and **other** crops.
- Undertake drainage of excess water to avoid water logging in case of heavy rainfall.

- Also continue intercultural operation, application of fertilizer and plant protection measures after current spells of rain.
- Weather conditions are favourable for the occurrence of **Tikka leaf spot** disease in **groundnut**. In case of attack, spray the solution of Kavach (2gm/litre water) or Indophil M-45 @ 5 gm + Bavistin @ 1gm in 4 litre of water after current spells of rain.
- Undertake weeding and top dressing after current spells of rain in **rice**. Drain out excess water and maintain 3-5 cm of standing water in the field.
- Continue sowing of **kulthi** and **niger / sarguja** (late crop) after current spells of rain by utilizing the monsoon showers.

Sikkim

Sky remained generally cloudy during the period. Very light to light rain occurred at a few on 21st and 22nd August and moderate rain at many places on 23rd August over East Sikkim. Rainfall was deficient during the period.

Rain / thunder showers are likely to occur at many places over the State.

Advisories

- Rain / thundershowers are likely to occur at many places over the State for the next three days. Under the circumstance, postpone irrigation to **orange, maize** and **large cardamom** crops.
- Postpone intercultural operations, application of fertilizers and pesticides in **orange, vegetables** and **ginger** as rain/ thundershowers likely to occur at many places.
- Incidences of **chirkey** and **foorkey** diseases are reported in **large cardamom**. Rouge out the affected crops and destroy the crops by burning. Monitor the crop for **caterpillar infestation** as the weather conditions are favourable for the incidence. Collect and destroy manually to prevent further incidences.
- Monitor **orange** for **trunk borer** and plug the holes in case of damage.
- Weather conditions are favourable for the attack of **rhizome rot** in **Ginger**. Monitor the crop for the disease and destroy the affected plants. Also arrange for drainage facilities to prevent spread of disease. Monitor the crop for **bacterial wilt** and rouge out the affected plants and burn well outside the field to protect the other plants.

Arunachal Pradesh

Rain / thundershower occurred at most places on 21st August, at many places on 18th and 23rd August and at a few places on 19th August, at one or two places on 17th, 20th and 22nd August. Sky remained partly cloudy over the State during the week.

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

Warning : Isolated heavy to very heavy rainfall is likely over the State during next 48 hours.

Advisories

- As rain / thundershowers are likely to occur at many places in the State for the next three days, postpone irrigation to **ginger, jhum rice** and **wet seeded rice**.
- Maintain required depth of standing water in **wet seeded rice** field.
- Adopt rain water harvesting measures in the field for subsequent use due to deficit rainfall received in the State.

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

Gujarat

Monsoon was active over Gujarat region & Daman, Dadra, Nagar Haveli. Rainfall occurred at isolated places over Saurashtra, Diu, Kutch on 21st August. Rainfall occurred at many places over Gujarat region,

Daman, Dadra, Nagar Haveli, at isolated places over Saurashtra, Diu on 22nd and 23rd August.

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

Advisories

- As most of the districts of the State received excess / normal rain during last few weeks and rain / thundershowers are likely at a few places over the State, apply irrigation to **sugarcane, Kharif groundnut, Kharif bajra, Kharif maize, pre-monsoon irrigated cotton and Kharif cotton** depending on the soil profile stored moisture.
- Also continue intercultural operation and application of fertilizer and plant protection measures to the crops on a non rainy day.
- Prepare land and continue transplanting of 3 – 4 weeks old **rice** seedlings in main field.
- Maintain 2 – 3 cm of standing water after 2 – 3 days of transplanting and 3 – 5 cm water in the field where **rice** crops are at tillering stage.
- Prepare land on a non-rainy day and continue sowing of **castor**. Select hybrid castor GAUCH-1, GCH-2, 4, 5 etc. for sowing.

Chattisgarh

Rain occurred at a few places in Bilaspur and Baster divisions & at isolated places in Raipur division on 21st August, monsoon was active in Bilaspur & Raipur divisions & at a few places in Bastar division on 22nd August and monsoon was active in all divisions of the State on 23rd August.

Rain / thundershowers are likely at many places over Chhattisgarh.

Warning: Isolated heavy to very heavy rainfall likely over Chattisgarh during next 48 hours.

Advisories

- As most of the districts received excess or normal rainfall during last week and rain / thundershowers are likely at many places over the State for next three days with the possibility of heavy to very heavy falls at isolated places over the state during next 48 hrs., postpone irrigation to **Sugarcane, green gram, black gram, red gram, soybean and groundnut** and **early sown vegetables** and make arrangement for draining out excess water from the field.
- Drain out excess water and maintain 3 – 5 cm water in the **kharif rice** fields.
- Also postpone intercultural operation and application of fertilizer and plant protection measures to the crops.
- Also postpone sowing and transplanting of **vegetables** under prevailing weather condition.
- There is possibility of attack stem borer in **rice**. If noticed, carbofuran 0.75 kg / ha or quinalphos 1kg / ha may be applied after current spell of rain.
- There is possibility of attack of leaf eating insects in **pulses**. If noticed, endosulphon 35 EC @ 1000 ml or quinalphos or methyl demeton 25 EC @ 800 ml / ha may be applied after current spell of rain.

Maharashtra

Rainfall occurred at most places over Konkan, at a few places over Madhya Maharashtra & West Vidarbha, and at isolated places in East Vidarbha & Marathwada.

Rain / thundershowers are likely at a few places over Konkan and Goa, Madhya Maharashtra and Marathwada and at many places over Vidarbha.

Advisories

- As there was no significant rain during last week in Marathwada and rain / thundershower likely to occur at a few places in this region, apply irrigation to **Sugarcane, Jowar, Kharif groundnut, bajra, soybean, sunflower, kharif cotton, tur, moong and Cotton (irrigated)**. As the districts of Konkan and Goa, Madhya Maharashtra received sufficient rain during last few weeks and as rain / thundershowers are likely at many places over Vidarbha, postpone irrigation to the crops in these

regions.

- Undertake intercultural operation on a non-rainy day in Konkan and Goa, Madhya Maharashtra and Marathwada to keep the field weed free.
- A second dose of 40 kg Nitrogen / ha may be applied after 1 month from transplanting of rice. Water may be drained out before the application of fertilizer and 3 – 5 cm water may be maintained in the field after 2 – 3 days.
- Mild incidence of White Woolly Aphids in Aurangabad and Pune and Pyrilla and White fly in Nashik in sugarcane, Stem borer in Raigad, Army worm, Leaf roller, Blue beetle in Sindhudurga and blast in Gondia in Kharif rice, Shoot fly in jowar in Amraoti, Leaf eating cater pillar and Leaf roller in Kolhapur in Groundnut, Leaf eating cater pillar in Kolhapur, Latur and Amraoti div. and Wardha dist in soybean, Leaf cater pillar in Latur division in sunflower, Aphids and Jassids in Marathwada and Vidarbha and Leaf cater pillar in Latur division in irrigated cotton and Aphids and Jassids in Aurangabad and Vidarbha division in kharif cotton and leaf roller in Amravati division in tur is reported.
- For the control of White Woolly Aphids in sugarcane, release 2500 eggs or larvae of *Krisoperla Karnea* or *Konobatra Aphidivora* parasite on the leaves or spray Endosulphan 1 ml plus Metasistox 1 ml mixed in 1 liter water in Madhya Maharashtra and Marathwada on a non-rainy day.
- Monitor the stem borer population in rice in Konkan and if crosses economic threshold level, use phorate 10G @ 10 kg or Quinalphos 5G @ 15 kg / ha on a non rainy day.
- Monitor the army worm population in rice in Konkan and if crosses economic threshold level, spray 25 % Cypermethrin @ 120 ml or 36 % Monocrotophos @ 700 ml / ha in 500 liter water on a non rainy day.
- Monitor the Leaf roller population in rice in Konkan and integrated pest management may be done. Spray 5% Neem extract or release 50000 eggs / ha of *Tricogama Japonicam* 3 to 4 times after 10 days interval or on major incidence spray 36 % Monocrotophos @ 700 ml in 500 liter water on a non rainy day.
- Monitor the blast disease in rice and if crosses economic threshold level, Blitox 50 (Copper oxychloride) @ 2.25 kg or Bavistin 50 WP @ 750 g or Hinosan @ 750 ml in 750 litre water / ha may be applied on a non-rainy day in Madhya Maharashtra and Marathwada.
- Monitor the shoot fly 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 on a non rainy day in Madhya Maharashtra and Marathwada.
- Monitor the leaf roller population in groundnut and if crosses economic threshold level, spray 36% monocrotophos @ 700 ml or 25% quinolphos @ 1000 ml / ha in 500 liter water on a non rainy day in Madhya Maharashtra and Marathwada.
- Monitor the leaf eating cater pillar population in soybean and if crosses economic threshold level, spray quinolphos 25 EC or monocrotophos 36 EC @ 700 ml / ha in 500 liters of water on a non rainy day in Madhya Maharashtra and Marathwada.
- Monitor the leaf cater pillar population in sunflower and if crosses economic threshold level, spray 2 gm Boryak in one liter only on flowers at the time of opening of florets on a non rainy day in Madhya Maharashtra and Marathwada.
- Monitor aphids and jassids population in cotton and if crosses economic threshold level, spray methyl dimeton 25EC or dimethoate 30EC @ 500 ml / ha in 500 liter water on a non rainy day in Madhya Maharashtra and Marathwada.
- Monitor leaf roller population in tur and if crosses economic threshold level, spray 1000 ml endosulphon / ha in 500 liter water on a non rainy day in Madhya Maharashtra and Marathwada.
- Postpone intercultural operation and application of fertiliser and plant protection measures in Vidarbha under prevailing weather condition.

Madhya Pradesh

Rainfall occurred at many places in South East M.P. on 23rd August, at a few places in North East M.P. on 22nd and 23rd August, South East M.P. on 22nd August and at isolated places over rest of the State on remaining days.

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

Warning: Isolated heavy to very heavy rainfall likely over the State.

Advisories

- Thinning, weeding and hoeing of cotton, maize, soyabean, urad and jowar may be done after current spells of rain.
- As rain / thundershowers are likely at many places over the State, postpone irrigation to sugarcane.
- Make arrangements to drain out excess water in standing crops in West Madhya Pradesh where excess rainfall occurred in number of districts and rainfall is expected at many places over the sub-division.
- To protect crops against chaipa, pyrilla or scale insects in sugarcane, spray oxydematon methyl or dimethoate @ 1 lit / ha after current spells of rain.
- Monitor semi looper incidences in kharif soyabean, if the pest population crosses economic threshold level, spray 5% solution of Nimboli powder or spray 30 to 40 days old Butter milk every 10 days. To control pests by chemical method for Blue beetal spread Quinolphos powder 25 E.C. or Endosulphon 35 E.C. @ 1.5 litre / hactre, for Gardle beetal spray Trijophos 40 E.C.or Monochrotophos 36 S.L. @ 800 ml dissolved in 750 litre of water / hactre. For Green semilooper spray trijophos 40E.C. @1.5 litre or Ethophanprax @ 1 litre / hactre after the current spells of rain.

Orissa

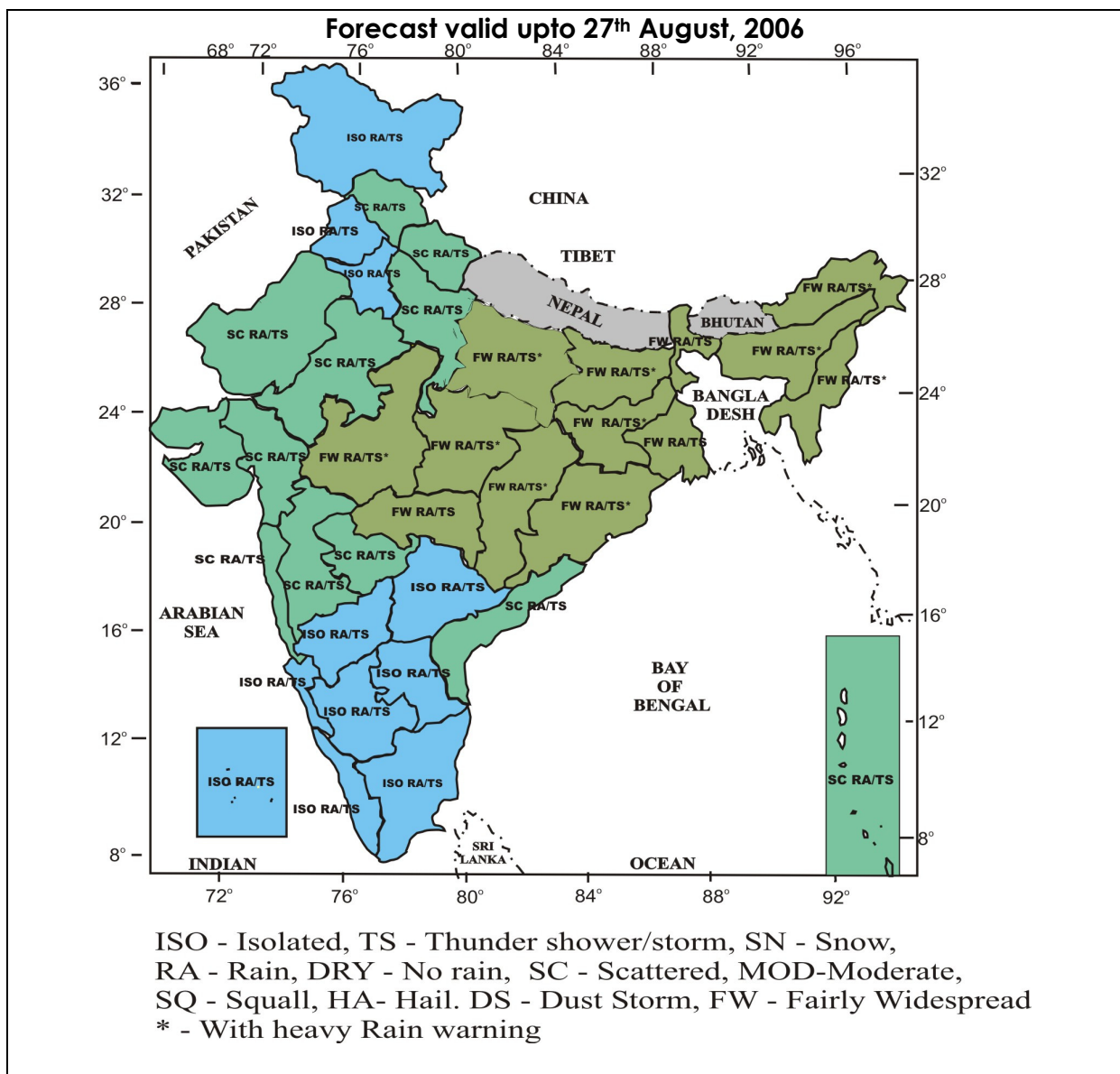
South west monsoon was vigorous over the State on 22nd & 23rd August and active on 21st August. Rain fall occurred at most places over the State during the above period.

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

Warning: Isolated heavy to very heavy fall is likely over interior Orissa during next 48 hrs.

Advisories

- Excess rainfall occurred at most places over the State during last week. Rain or thunder showers are likely at many places with isolated heavy to very heavy rainfall over the State during next 2-3 days. Under the circumstances, postpone irrigation to vegetables, sugarcane and jute crops.
- Farmers are advised to continue land preparation and sowing of kharif crops like rice, groundnut and pulses after current spells of rain.
- At five months stage of sugarcane crop perform propping by combining plants of two rows so that the crops do not lodge by wind.
- Undertake drainage of excess water to avoid water logging.
- Also postpone intercultural operation, application of fertilizer and plant protection measures under prevailing weather condition.



Salient weather features for the week ending 23/08/06

METEOROLOGICAL ANALYSIS

- Last week's low pressure area over southwest Madhya Pradesh and adjoining southeast Rajasthan lay over Saurashtra & Kutch and neighbourhood on 17th and moved away westwards on 18th.
- Last week's depression over north Orissa moved northwestwards and lay centred at 0830 hours IST of 17th over Chhattisgarh about 100 km east of Champa. Moving west-northwestwards, it lay centred at 0830 hours IST of 18th over southeast Madhya Pradesh about 100 km southwest of Bhopal. It weakened into a well marked low pressure area and lay over southeast Rajasthan and adjoining West Madhya Pradesh in the morning of 19th. It lay as a low pressure area over West Rajasthan and neighbourhood during 20th to 22nd and over southeast Pakistan and adjoining southwest Rajasthan on 23rd.
- A fresh low pressure area formed over north Bay of Bengal off West Bengal-Bangladesh coast on 20th morning. It persisted off north Orissa-West Bengal coast on 21st. It lay over northwest Bay of Bengal and adjoining Orissa-West Bengal coast and became well marked on 22nd. It lay over Jharkhand and neighbourhood on 23rd.
- The axis of the monsoon trough at sea level lay either in its normal position or to the south throughout the week.

RAINFALL

Under the influence of the above systems:

- Widespread/fairly widespread rainfall with scattered/isolated heavy to very heavy falls occurred over Orissa throughout the week and monsoon was active/vigorous over Orissa during first day and last three days of the week. Fairly widespread rainfall with isolated heavy to very heavy falls also occurred over Gangetic west Bengal and Jharkhand throughout the week and monsoon was active during last two days of the week. Fairly widespread rainfall with isolated heavy falls also occurred over other sub-divisions of eastern India during last two days.

- Fairly widespread rainfall with isolated heavy falls occurred over Chhattisgarh during first two days and last two days of the week. Fairly widespread/widespread rainfall with isolated/scattered heavy to very heavy falls occurred over Madhya Pradesh on 18th & 19th. Monsoon was active on most of these days.
- Fairly widespread/widespread rainfall with isolated/scattered heavy to very heavy falls occurred over Gujarat region and Rajasthan during most days of the week and over Saurashtra & Kutch on some days. Monsoon was active/vigorous over West Rajasthan on many days and over Gujarat Region & East Rajasthan on a few days during the week.
- Fairly widespread rainfall with isolated heavy to very heavy falls occurred over Coastal Karnataka, South Interior Karnataka and Kerala during 1st half of the week.

The rainfall was subdued over northeastern States, most parts of northwest India excluding Rajasthan and many parts of peninsula excluding Tamil Nadu & Pondicherry and Rayalaseema during the week.

RAINFALL DURING THE WEEK ENDING ON 23RD AUGUST, 2006

Rainfall was excess/normal in 15 and deficient/scanty in 21 out of 36 meteorological sub-divisions (Actual: 56.6 mm, Normal: 58.0 mm and Departure: -2%).

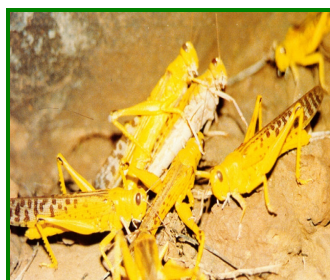
CUMULATIVE SEASONAL RAINFALL (1ST JUNE TO 23RD AUGUST, 2006)

Rainfall was excess/normal in 24 and deficient in 12 out of 36 meteorological sub-divisions. (Actual: 654.8 mm, Normal: 660.2 mm and Departure: -1%).

OUTLOOK FOR THE WEEK ENDING ON 23RD AUGUST, 2006.

- Numerical weather prediction models suggest northward shift of western end of monsoon trough and increase in rainfall activity over Western Himalayan region and adjoining Indo Gangetic plains during first half of the week.
- A fresh low pressure area is likely to form over north Bay of Bengal off Orissa-West Bengal coast around 28th resulting in increase in rainfall over Orissa, Gangetic West Bengal, Jharkhand and Chhattisgarh.

Desert Locust Forecasting



Rainfall (mm)							
Station Name	17.8.06	18.8.06	19.8.06	20.8.06	21.8.06	22.8.06	23.8.06
Amritsar	-	-	-	-	-	-	0.01
Barmer	0.05	0.04	0.43	0.79	1.22	1.62	0.22
Sriganganagar	-	-	-	-	-	-	-
Jaisalmer	0.01	0.07	0.68	0.01	1.36	-	-
Kota	-	0.19	0.12	0.07	-	-	-
Deesa	0.45	0.001	0.41	1.13	0.37	0.02	0.01
Churu	-	-	-	-	-	-	-

Temperature (degree celcius)							
Station Name	17.8.06	18.8.06	19.8.06	20.8.06	21.8.06	22.8.06	23.8.06
Amritsar							
Barmer							
Sriganganagar				Data			
Jaisalmer				Not			
Kota				Available			
Deesa							
Churu							

Wind

Station Name	17.8.06		18.8.06		19.8.06		20.8.06		21.8.06		22.8.06		23.8.06	
	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.	Speed	Dir.
Amritsar	-	-	-	-	10	SE	20	SE	06	SSE	03	E	-	-
Barmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sriganga nagar	-	-	05	ENE	05	ENE	25	E	19	E	-	-	-	-
Jaisalmer	-	-	10	ESE	10	NE	-	-	-	-	-	-	-	-
Kota	-	-	25	ENE	-	-	-	-	25	WSW	17	WSW	-	-
Deesa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Churu	-	-	10	ENE	20	NE	20	S	10	SSE	-	-	-	-

Due to prevailing weather conditions in the North & North Western belt, there are chances of migration of locust from the Indo-Pakistan border). Farmers in J&K, H.P., Punjab, Haryana, Rajasthan, Gujarat, U.P. and Uttaranchal are advised to monitor the locust and if noticed on the field, carry out anti-locust operations i.e. spray pesticides on standing crops and vegetation to minimize the damage from any possible locust invasion.

CROP – STATE – STAGE

Delhi

Vegetable crops	Kharif vegetables	Arhar	Rice	Green gram, black gram
Vegetative/Flowering / fruiting / harvesting	Transplanting	Vegetative/flowering	Tillering	Pod formation
Bajra	Fodder (Mixed maize , Lobia)	Maize		
Vegetative/flowering	Vegetative	Vegetative/tasseling/silking		

Haryana

Horticultural crop	Sugarcane	Paddy	Maize	Cotton
Vegetative/fruiting	Vegetative	Vegetative	Vegetative/early tasseling	Vegetative to square formation
Bajra	Groundnut	Kharif pulses		
Early vegetative	Flowering/early pod formation	Seedling/early vegetative		

Himachal Pradesh

Rice	Maize	Apple	Summer vegetables (Tomato, brinjal, ladies finger)	Fodder crops
Tillering/panicle initiation/flowering	Tasseling/silking/cob formation	Harvesting	Vegetative/flowering/ fruiting / harvesting	Vegetative
Moong / Mash	Fruit plants	Potato	Summer vegetables Cauliflower/Cabbage	
Pod development	Fruiting/maturity	Tuber formation/ maturity	Preparation of nursery (Lower hills) Transplantation (Mid hills)	

Jammu & Kashmir

Vegetables crops	Rice	Maize	Kharif crops	Horticultural crops
Late vegetative	Tillering	Vegetative	Vegetative	Planting
Fodder crops (Maize, Bajra, MP Chari)				
Vegetative				

Punjab				
Sugarcane	Paddy	Maize	Cotton	Kharif pulses
Vegetative	Vegetative/flowering	Vegetative/early tasseling	Vegetative to square formation	Vegetative
Groundnut				
Flowering/early pod formation				
Rajasthan				
Cotton	Groundnut	Bajra / Maize /	Pulses	Soyabean
Square formation/flowering	Vegetative/flowering	Vegetative	Seedling/early vegetative	Vegetative/flowering
Uttar Pradesh				
Early sown Pulses	Kharif Pulses (Urad & Moong)	Sugarcane	Kharif Vegetables (Early sown)	Summer vegetables
Early vegetative/vegetative	Early vegetative/vegetative	Vegetative	Early vegetative/vegetative	Harvesting
Mango	Kharif Maize, Jowar, Bajra	Kharif rice	Kharif vegetables	Kharif Oilseeds (Til, Soybean, Groundnut)
Harvesting	Early vegetative/vegetative	Early vegetative/vegetative	Transplanting	Early vegetative/vegetative
New Mango				
Active growth				
Uttaranchal				
Rice & cauliflower	Mango/Lichi	Lady's finger / French Bean	Sugarcane	Chilli & Tomato
Vegetative	Seedling	Fruiting	Tillering	Fruiting / maturity
Apple	Millets			
Maturity	Vegetative			
Assam				
Maize	Sugarcane	Jute	Summer vegetables	Black gram and Green gram
Harvesting	Vegetative /cane maturity	Harvesting	Fruiting/Maturity / harvesting	Land preparation/sowing
Transplanted Sali rice	Arhar	Sali rice	Regular ahu rice	
Vegetative/tillering	Vegetative	Transplanting	Harvesting	
Arunachal Pradesh				
Wet seeded rice	Ginger	Potato	Summer vegetables	Jhum Paddy
Grain formation stage	Harvesting	Land preparation	End Harvesting	Grain formation/maturity stage
Bihar				
Vegetables	Rice	Maize	Pulses and Oil seeds	
Vegetative	Early vegetative	Vegetative	Vegetative	
Jharkhand				
Rice	Upland crops (groundnut, arhar, urad)		Finger millet	Maize
Early vegetative	Early vegetative/vegetative		Early vegetative/vegetative	Early vegetative/vegetative
Kharif vegetables (Tomato, Cabbage, Cauliflower, Brinjal, Chilli)	Upland crops (Early sown crops)			
Transplanting	Early vegetative/vegetative			
Sikkim				
Orange	Rice	Large Cardamom	Kharif vegetables	Ginger
Fruiting/harvesting	Active tillering	Seed development	Vegetative/fruiting/harvesting	Late vegetative
Maize				
Cob harvesting				

West Bengal				
Aus rice	Sugarcane	Jute	Green Gram	Aman rice
Grain formation	Vegetative	maturity/harvesting	Vegetative / Flowering/pod formation	Transplanting
Groundnut	Early transplanted rice			
Vegetative/flowering/pegging	Early vegetative/tillering			

Chattisgarh				
Chilly, Brinjal, Ladies finger, Beans, Bottle gourd	Kharif Vegetables	Sugarcane	Kharif rice	Soybean
(summer veg.- Vegetative / flowering / fruiting / harvesting)	Sowing / transplanting	Vegetative	Tillering	Seedling/vegetative/flowering
Green gram / Black gram(early sown)	Blackgram / Greengram	Groundnut	Red Gram	
Vegetative / flowering / pod formation	Vegetative/flowering/pod formation	Seedling/vegetative/flowering	Seedling/vegetative/flowering	

Gujarat				
Kharif Maize	Premonsoon irrigated Cotton	Kharif groundnut	Early Sown Rice	Sugarcane
Vegetative	Vegetative/ Square formation	Vegetative	Early tillering/tillering	Vegetative / elongation
Kharif Cotton	Castor	Kharif bajra	Kharif Rice	
Vegetative	Sowing	Vegetative	Transplanting	

Maharashtra				
Kharif Groundnut	Tur	Irrigated Cotton	Sugarcane (Seasonal)	Bajra (Madhya Maharashtra, Marthwada and Vidarbha)
Vegetative/flowering/pegging	Early vegetativebranching	Vegetative square formation	Early vegetative/vegetative	Vegetative/flag leaf initiation
Jowar	Kharif sunflower	Soyabean	Kharif rice (Konkan)	Kharif rice (Madhya Maharashtra, Marathwada & Vidarbha)
Early vegetative/vegetative	Early vegetative/vegetative/floral bud formation	Vegetative	Early tillering/tillering	Early tiling (in Vidarbha)/ Ealy /active Tillering (in Madhya Maharashtra, Marathwada &
Moong	Kharif cotton			
Vegetative	Early vegetative/vegetative			

Madhya Pradesh				
Sugarcane	Moong	Kharif crops (Jjowar, cotton, urad, tur)	Kharif Soyabean	Kharif rice
Vegetative	Vegetative / flowering	Vegetative	Flowering	Tillering
Maize				
Silking/tasseling				

Orissa					
Vegetables	Earlier sown vegetables	Early sown Groundnut	Groundnut	Sugarcane (pre-seasonal)	
Sowing / transplanting/vegetative	Flowering / fruiting / harvesting	Early vegetative/vegetative	Sowing	Vegetative/tillering	
Kharif rice	Pulses	Early sown Pulses		jute	
Sowing / nursery sowing / transplanting	Sowing	Early vegetative/vegetative		Vegetative	

Andhra Pradesh

Early sown kharif rice	Kharif rice	Kharif crops(Groundnut/Maize/Chillies/Cotton/Tur)		
Seedling/early vegetative	Transplanting/Nursery sowing	Vegetative		

Karnataka

Groundnut	Sugarcane	Kharif crops (jowar, maize, cotton)	Kharif rice	Early sown rice
Vegetative/flowering/peg formation	Vegetative -ratoon crop	Vegetative/flowering/grain formation	Nursery sowing	Transplanting

Kerala

Rubber	Virippu Rice			
Tapping	Grain filling/early maturity			

Tamil Nadu

Rice (Navarai)	Millets	Summer irrigated cotton	Early & mid sugarcane	Late season sugarcane
End Harvesting	Late vegetative	Boll development/maturity	Vegetative / Grand growth	Harvesting
Rice (Kuruvai)	Pulses	Groundnut		
Transplanting	Late vegetative	Late vegetative		