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**ICAR-central Institute for Cotton Research, Nagpur**  
An ISO 9001:2015 Certified Organisation

**Twelfth Weekly Advisory for Cotton Cultivation from 27<sup>th</sup> August to 02<sup>nd</sup> September, 2026**

**A. General advisory on soil health, nutrition, pest and disease management**

Higher cotton yields rely on balanced soil nutrition, water management, and proactive, monitoring-based pest and disease management. Implementing a holistic and integrated crop management plan ensures proper growth and vigour, reduces input costs, and protects the crop from devastating pest and disease damage.

**Soil health & nutrition management (INM)**

- **Optimize macronutrients:** Improve soil health by prioritizing crop rotation, organic amendments, and cover crops, and by using rational chemical fertilization based on pre-sowing soil testing.
- **Apply micronutrients:** Address secondary and micronutrient deficiencies (such as Zinc, Boron, Manganese, and Magnesium) proactively via targeted foliar sprays as needed.

**Disease management (IDM)**

- **Deploy preventative practices:** Management of both soil-borne and foliar pathogens should be achieved through integrated cultural practices, including proper field sanitation and the application of biopesticides and biofertilizers as seed and soil treatments to enhance plant health and suppress disease incidence.
- **Control foliar outbreaks:** Regular field monitoring should be undertaken during periods of high humidity, and recommended fungicides should be applied judiciously only when prevailing environmental conditions are conducive to rapid disease development and spread.

**Integrated pest management (IPM)**

- **Conduct field scouting:** Perform weekly field scouting to monitor sucking pests (such as thrips, aphids, jassids and spider mites) alongside bollworms.
- **Utilize traps & biopesticides:** Deploy pheromone traps early in the season to track adult moth flights, predict egg-laying cycles and apply organic, natural or plant-based pesticides as a primary response.
- **Conserve natural enemies:** Safeguard beneficial insects like lady beetles, lacewings and big-eyed bugs by choosing highly selective insecticides over broad-spectrum formulas.
- **Restrict chemical interventions:** Use label-recommended chemical pesticides strictly as a last resort, deploying them only when pest populations reach established economic thresholds.

## B. Location-specific advisory

| PUNJAB                                                                           |          | Actual Rainfall in last week(mm) |      |                |     |                   |    |    | Predicted Rainfall in next week (mm) |     |     |                     |    |
|----------------------------------------------------------------------------------|----------|----------------------------------|------|----------------|-----|-------------------|----|----|--------------------------------------|-----|-----|---------------------|----|
|                                                                                  |          | August                           |      |                |     |                   |    |    | August                               |     |     |                     |    |
|                                                                                  |          | 18                               | 19   | 20             | 21  | 22                | 23 | 24 | 26                                   | 27  | 28  | 29                  | 30 |
|  | Firozpur |                                  |      |                |     |                   |    |    | 0                                    | 0.1 | 0   | 0                   | 0  |
|                                                                                  | Faridkot | 0                                | 0    | 0              | 0   | 0                 | 0  | 0  | 0                                    | 0.1 | 0   | 0                   | 0  |
|                                                                                  | Muktsar  |                                  |      |                |     |                   |    |    | 0                                    | 0.2 | 0   | 0                   | 0  |
|                                                                                  | Bhatinda | 0                                | 0    | 0              | 0   | 0                 | 0  | 0  | 0                                    | 0.1 | 0.1 | 0                   | 0  |
|                                                                                  | Sangrur  |                                  |      |                |     |                   |    |    | 0                                    | 0   | 0.1 | 0                   | 0  |
|                                                                                  | Ludhiana | 0                                | 36.8 | 3.4            | 9.8 | 0                 | 43 | 0  | 0                                    | 0.2 | 0   | 0                   | 0  |
| Amount of rainfall & colour Code                                                 |          | 0.1 to 2.4 mm                    |      | 2.5 to 15.5 mm |     | 15.6 to 64.4 mm   |    |    | 64.5 to 115.5 mm                     |     |     | 115.6 to 204.4      |    |
| Rainfall category                                                                |          | Very light rainfall              |      | Light rainfall |     | Moderate rainfall |    |    | Heavy rainfall                       |     |     | Very heavy rainfall |    |

### Crop condition

At Bathinda, the crop is 92 to 112 days old at flowering to boll development stage. Hoeing and weeding operations were taken up. One to two sprays of 2% Potassium nitrate (13:0:45) were given in cotton fields where flowering has been initiated. Weeds like *Chulai* (*Amaranthus viridis*), *Dodhak* (*Euphorbia* spp), *Tandla* (*Digera arvensis*), *Madhana* (*Eleusine* spp), *Trianthema monogyna*, *Makru* (*Ipomea* spp), *Khabbal* (*Cynodon dactylon*), *Chibber bel* (*Cucumis trigonus*) have infested the fields. Whitefly population ranged from 01-27 per three leaves and jassids 01-06 per three leaves. Infestation of pink bollworm varied from 0-15 % green boll damage. With reference to disease incidence, CLCuV and TSV were observed

At Faridkot, the crop is 100 to 110 days at boll formation to development stage. Manual hand hoeing to remove leftover weeds from intra-row spaces and insecticide sprays were done. Weeds like *Trianthema* spp. (Itsit), *Digera* spp. (Tandla) have infested the fields but were controlled with recommended herbicides. Whitefly and jassid populations were below ETL at most of the locations. The thrips population declined compared to last week. The incidence of TSV was also spotted at a few locations with low severity. Pink bollworm infestation on flowers was below ETL at the locations surveyed.

### Advisory:

At Bathinda, overall crop condition is good. Give four sprays of 2% Potassium nitrate (13:0:45) at weekly intervals in cotton fields in order to reduce flower drop and improve boll set. Desi cotton grown in medium to high fertility soils, generally attain unmanageable height for effective spraying against bollworms. The top portion of plants with excessive height usually remain unsprayed. Fruiting bodies of these uncovered plant portions contribute very little towards yield but greatly help in bollworm build up. Detop the plants attaining height more than 1.5 m as and when required by using pruning secateur/sickle/green mulberry stick. If the whitefly adult population is above ETL, spray Afidopyropen 50 DC @ 400 ml per acre or Flonicamid 50 WG @ 80 g per acre or Clothianidin 50 WG @ 20 g per acre or Dinotefuran 20 SG @ 60 g per acre or Pyriproxyfen @ 200 g per acre. To control jassid population above ETL, spray Dinotefuran 20 SG @ 60 g/acre or Tolfenpyrad 15 EC @ 300 ml/acre or Fenpyroximate 5 EC @ 300 ml/acre. In case of thrips population above ETL, spray the crop with Profenophos 50 EC @ 500 ml/acre or Spinetoram 11.7 SC @ 170 ml per acre. If thrips and PBW population recorded above ETL then, spray Profenophos 50% EC @ 500 ml per acre. Flonicamid 50% WG @ 80 g per acre using 200 litres of water may be sprayed to control whitefly population below ETL. Install pheromone traps @ 2 per acre to monitor the population of PBW. Remove 'rosette flowers', if any, and destroy them. Spray Emamectin benzoate 5 SG @ 100 g/acre or Spinetoram 11.7 SC @ 170 ml/acre using 200 litres of water, if green boll infestation is above 5% (ETL). If incidence of parawilt is observed in the fields, apply 23 drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg/100 litres of water at one-week intervals starting immediately after symptom development or spray Cobalt chloride solution 10 mg/ litre of water immediately after the appearance of symptoms on the affected plants and repeat twice at 5-7-day intervals. Manage the whiteflies with recommended dose of insecticides to check spread of CLCuV. Spray Azoxystrobin 18.2% + Difenoconazole 11.4% SC @ 200 ml in 200 litres of water to control fungal foliar leaf spots of cotton. In case sooty mould develops, 1-2 prophylactic/therapeutic sprays of Propiconazole 25%EC @10ml/10L (500ml/ha) Or Copper oxychloride (COC) 50%WP @ 25g/10L (1250g/ha) at 10-15 days interval may be applied.

At Faridkot, farmers are advised to start Potassium nitrate (13:0:45) spray @ 2% to improve boll setting and reduce flower drop at 7-10 days interval. For this, dissolve 2 kg of Potassium nitrate in good quality water and spray should be very fine so that it gets retained on leaves. If whitefly infestation exceeds ETL, spray Flonicamid 50 WG @ 80 g/acre or Dinotefuran 20 SG @ 60 g/acre; in case of higher infestation of whitefly adults and nymphal population, prefer Ethion 50 EC @ 800ml/acre or Afidopyropen@ 400 ml/acre alternately with Pyriproxyfen @ 500 ml/acre. Nitrogen fertilizer should be applied only after management of whitefly. In case of high thrips infestation,

apply light irrigation for its management. If the infestation increases, spray Profenofos 50 EC @ 500 ml/acre (in 200 litres of water for one acre). Monitor pink bollworm using funnel or delta traps baited with Gossyplure, @ 2 per acre, and installed at about 15 cm above the crop canopy. Replace the lure after every 15 days and use 5 traps/ha. Keep the fields and fallow/barren areas around the farm/canals, etc., free from weeds, which act as collateral hosts of leaf curl virus. After irrigation, some plants might show wilting due to Para wilt which can be checked by spraying Cobalt chloride @ 10 mg/ litre of water on the affected plants at the initial stage of wilt symptoms. For management of thrips-transmitted Tobacco Streak Virus (TSV), strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Keep the fields and fallow/barren area around the farm/canals etc. free from Kanghi buti (*Sida* sp.) and Peeli buti (*Abutilon* sp.) which act as collateral hosts of CLCuD. In case sooty mould develops, 1-2 prophylactic/therapeutic sprays of Propiconazole 25%EC @10 ml/10L (500ml/ha) Or Copper oxychloride (COC) 50%WP @ 25g/10L (1250g/ha) at 10-15 days interval may be applied.

| HARYANA                                                                          |        | Actual Rainfall in last week(mm) |    |                |    |                   |    |                  | Predicted Rainfall in next week (mm) |                     |     |     |    |
|----------------------------------------------------------------------------------|--------|----------------------------------|----|----------------|----|-------------------|----|------------------|--------------------------------------|---------------------|-----|-----|----|
|                                                                                  |        | August                           |    |                |    |                   |    |                  | August                               |                     |     |     |    |
|                                                                                  |        | 18                               | 19 | 20             | 21 | 22                | 23 | 24               | 26                                   | 27                  | 28  | 29  | 30 |
|  | Hisar  | 0                                | 0  | 3.3            | 0  | 0                 | 0  | 0                | 0.1                                  | 0.2                 | 0   | 0   | 0  |
|                                                                                  | Jind   |                                  |    |                |    |                   |    |                  | 0                                    | 0.1                 | 0.2 | 0   | 0  |
|                                                                                  | Sirsa  |                                  |    |                |    |                   |    |                  | 0.2                                  | 0.1                 | 0   | 0   | 0  |
|                                                                                  | Rohtak | 0                                | 0  | 1              | 0  | 0                 | 0  | 0                | 0.1                                  | 0                   | 0.4 | 0.3 | 0  |
| Amount of rainfall & colour Code                                                 |        | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |    | 64.5 to 115.5 mm |                                      | 115.6 to 204.4      |     |     |    |
| Rainfall category                                                                |        | Very light rainfall              |    | Light rainfall |    | Moderate rainfall |    | Heavy rainfall   |                                      | Very heavy rainfall |     |     |    |

#### Crop Condition:

At Hisar, the crop is 91 to 126 days from flowering to boll opening stage. Manual hoeing and insecticide spray were taken up. Majority of the fields are infested with weeds like *motha*, *santhi* and *makra*. Foliar application of 13:00:45 @ 2 kg per acre is recommended. Whitefly crossed economic threshold in several fields along with honey dew and sooty mold symptoms while jassids incidence had decreased during the reporting period. The infestation of pink bollworm was noticed in several fields. Root rot, wilt and cotton leaf curl virus disease were observed in a few patches at some fields. Farmers have started picking of cotton that got opened due to stress.

At Sirsa, the crop is 100 to 120 days old at boll formation and boll development stages. Irrigation as well as split dose of Nitrogenous fertilizer application, hand hoeing wherever crop canopy is suitable were done. Insecticide spray to manage pests and diseases as well as micronutrient foliar spray were taken up. Weed infestation was noticed at few locations in the cotton fields. The population of jassids ranged between 03-15/ three leaves, whitefly increasing above ETL, between 10-58/ three leaves and thrips above ETL between 05-30 nymphs and adults / three leaves. Pink bollworm infestation was also reported above ETL with 10-20 % green boll damage.

#### Advisory:

At Hisar, farmers are advised to apply irrigation in cotton crop. Give foliar spray of 13:00:45 @ 2 kg per acre during peak fruiting stage at 7 to 10 days interval. Take up mechanical hoeing with a tractor followed by hand hoeing with kasola at appropriate stages. The population of sucking pests is crossing economic thresholds, and there is a need to monitor sucking pests (thrips, whitefly and jassids) on 20 plants/acre. This climate is favourable for the multiplication of whitefly and jassids. To control jassids and whitefly, spray Flonicamid 50 WG @ 80g per acre and Afidopyropen 50 G/L DC @400ml. In case of moderate to high infestation of whitefly with nymphal population, spray Pyriproxyfen 10 EC @ 400 ml or Spiromesifen 240 SC @240ml per acre. Do not follow tank mixing of insecticides. Since the infestation of pink bollworm started appearing, install pheromone traps @ 2 / acre. Examine at least 100 flowers or 20 green bolls per acre for pink bollworm infestation. Collect and destroy infested and rosette flowers in an early flush of flowering stage. In case of pink bollworm infestation in flower/bolls crosses the economic threshold (>5-10%), spray Enamectin benzoate 5SG @100g or Profenofos 50 EC @ 600 ml/acre or Quinalphos 20 AF @ 800 ml per acre. Follow-up spray of an alternate insecticide may be done after 10-12 days of the previous spray. In root rot and wilt affected patches, drench the affected roots with Carbendazim 50 WP@ 1.2 g/litre water. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250g or Carbendazim 50% WP @120g plus Urea 2kg per 100 litres of water at one week interval starting immediately after symptom development. Take up picking of stress mediated good opened bolls after proper drying of moisture. For the management of boll rot, foliar spray Carbendazim 12%+Mancozeb 63% WP @30g followed by Propineb 70%WP @25-30g or Propiconazole 25%EC @10ml or Azoxystrobin 18.2 % w/w+Difenoconazole 11.4% w/w SC @ 10ml or Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC @ 6 ml in 10 litres of water especially during flowering 60-120 days and as per weather conditions.. In case sooty mould develops, 1-2 prophylactic/therapeutic sprays of Propiconazole 25%EC @10ml/10L (500ml/ha) Or Copper oxychloride (COC) 50%WP @ 25g/10L (1250g/ha) at 10-15 days interval may be applied.

At Sirsa, farmers are advised to irrigate the field wherever required and apply pending split dose of Urea after irrigation or rains. Take up hand hoeing with kasola / khurpa to keep the crop weed-free. Keep field bunds and surroundings free from weed, cucurbits and other whitefly and CLCuD host plants. Start foliar application of N:P: K (13:0:45) @ 2.0 kg /100 litres water and repeat 2-3 times at 10-day intervals. Keep monitoring whitefly population manually and/or using yellow sticky traps @ 8-10/acre and keep the field bunds and surroundings free from other alternate host plants of whitefly. Continue monitoring for other sucking pests like jassids and thrips by observing 20 plants per acre and from underneath three leaves from each plant. To manage whitefly adults, apply Dinotefuran 20 SG @

60 g or Flonicamid 50 WG @ 80 g or Afidopyropen 50G/L @ 400 ml or Diafenthiuron 50 WP (wherever appropriate humidity exists either due to irrigation or rainfall) @ 200 gm or Profenophos 50 EC @ 500-800 ml/acre in 150 litre water. In the case of sooty mould develops, spray Propiconazole 25 EC @ 1 ml/litre or Copper oxychloride (COC) 50 WP @ 2.5 g/litre once or twice at 10-15 days interval. Manage jassid incidence by applying Tolfenpyrad 15 EC @ 300-400 ml or Fenpyroximate 5 EC @ 300 ml or Dinotefuran 20 SG @ 60 g/acre in 150 litres of water wherever the population crosses ETL (2 nymphs/leaf). Install yellow sticky traps @ 8-10 per acre to monitor whitefly population. Initial rowing population of thrips and PBW can be managed by spraying 5% neem seed kernel extract (NSKE) or Azadirachtin 1500 ppm (0.15% EC) @ 5ml/ litre of water. Manage pink bollworm population by spraying Emamectin benzoate 5 SG @ 100 g or Spinetoram 11.7 SC @ 170 ml or Profenophos 50 EC @ 500 ml per acre and use 150-200 litre water per acre. The spotted bollworm at 5% fruiting body damage (flared square or in shed fruiting bodies) in Desi (*arboreum*) cotton can be managed by spraying of Spinosad @ 75 ml/acre in 150 litres of water. Under heavy rainfall and waterlogging conditions, maintain proper drainage in the field to remove excess water from the fields to prevent crop damage. Monitor root rot and wilt disease incidence regularly. Drench early symptomatic and surrounding plants with *Trichoderma* spp. 1% WP @ 50 g or Carbendazim 50% WP @ 12 g/ 10 litres of water to manage root-rot and wilt disease. In case of appearance of parawilt symptoms, apply 2-3 drenches with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 120 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development or spray Cobalt chloride @ 10 mg (one gram in 100 litres water) or Sodium benzoate @ 50 mg per litre (5 g in 100 litres water) of water immediately after the appearance of symptoms (within 24 hours) on affected plants only.

| RAJASTHAN                                                                        |                | Actual Rainfall in last week(mm) |    |                |    |                   |    |                  | Predicted Rainfall in next week (mm) |                     |     |     |    |
|----------------------------------------------------------------------------------|----------------|----------------------------------|----|----------------|----|-------------------|----|------------------|--------------------------------------|---------------------|-----|-----|----|
|                                                                                  |                | August                           |    |                |    |                   |    |                  | August                               |                     |     |     |    |
|                                                                                  |                | 18                               | 19 | 20             | 21 | 22                | 23 | 24               | 26                                   | 27                  | 28  | 29  | 30 |
|  | Ajmer          | 0                                | 0  | 0              | 0  | 0                 | 0  | 0                | 1.8                                  | 2                   | 0.3 | 0   | 0  |
|                                                                                  | Jodhpur        | 0                                | 0  | 0              | 0  | 0                 | 0  | 0                | 0                                    | 0.1                 | 0   | 0   | 0  |
|                                                                                  | Nagaur         |                                  |    |                |    |                   |    |                  | 0.2                                  | 0.2                 | 0.1 | 0.1 | 0  |
|                                                                                  | Pali           | 0                                | 0  | 0              | 0  | 0                 | 0  | 0                | 0.2                                  | 0.2                 | 0   | 0   | 0  |
|                                                                                  | Sri Ganganagar | 0                                | 0  | 0              | 0  | 0                 | 0  | 0                | 0.1                                  | 0.1                 | 0   | 0   | 0  |
| Amount of rainfall & colour Code                                                 |                | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |    | 64.5 to 115.5 mm |                                      | 115.6 to 204.4 mm   |     |     |    |
| Rainfall category                                                                |                | Very light rainfall              |    | Light rainfall |    | Moderate rainfall |    | Heavy rainfall   |                                      | Very heavy rainfall |     |     |    |

#### Crop Condition:

In Sriganganagar and Hanumangarh districts, the crop is 96 to 112 days old at flowering stage. Manual hoeing/weeding and intercultural operations were taken up. Jassid ranged from 0.0 to 4.00/three leaves, whitefly incidence noticed 2.00 to 12.00/three leaves and thrips population observed ranging from 3.00 to 16 .00/three leaves.

At Banswara, the crop is 50 to 56 days old at squaring, flowering and boll formation stages. Intercultural operations and fertilizer application were given. No infestation of weeds. Among sucking pests, the incidence of jassids was above ETL. No incidence of diseases.

#### Advisory:

In Sriganganagar and Hanumangarh districts, farmers are advised to give foliar application of KNO<sub>3</sub> @ 2% where the crop is above 65 days. Remove weeds near and around the cotton fields. Monitor the crop for insect pests and disease regularly. The locations found infested with pink bollworm last year need to be monitored closely for PBW infestations this year. Install pheromone traps @ 5/ha to monitor pink bollworm activity. In case of recording rosette flowers of more than 5 out of 100 flowers or bolls infestation more than 5%, spray Profenophos 50% EC @ 2.00 ml/litre or Emamectin benzoate 5 SG@ 0.50 g/litre or Indoxacarb 14.5 SC @ 1.0 ml/litre of water. Apply a spray of Flonicamid 50 WG @ 0.40 gm/ litre or Afidopyropen 50 DC @ 1.50 ml/litre of water or Thiamethoxam 24 WG @ 0.5 g/litre of water to control jassids and whitefly while in case of nymph of whitefly, apply Pyriproxyfen 10% EC @ 2.5 ml/litre or Spiromesifen 22.9 SC @ 1.25 ml/litre of water. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @0.84 ml/litre or Profenophos 50 EC @ 2 ml/ litre of water. In case sooty mould develops, 1-2 prophylactic/therapeutic sprays of Propiconazole 25%EC @10ml/10L (500ml/ha) Or Copper oxychloride (COC) 50%WP @ 25g/10L (1250g/ha) at 10-15 days interval may be applied.

At Banswara, farmers are advised to make proper drainage systems in their fields, looking to forecast rains. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriithobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriithobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Continue monitoring cotton fields for any signs of sucking pest infestation. Spray 5% neem seed kernel extract (NSKE) or Azadirachtin 1500 ppm (0.15% EC) @ 5 ml/ litre of water to control sucking pests if it goes beyond ETL. Install yellow sticky traps 8-10/acre to manage whitefly and jassids. In case of sucking pests exceeding ETL, spray any one of these insecticides: Buperfezin 25 EC @ 1.25 litre/ha or Diafenthiuron 50 WP @625 g/ha or Flonicamid 50 WG @ 200 g/ha. Install pheromone traps for pink bollworm (5/ha). Regularly monitor pink bollworm occurrence and destroy the affected flowers (rosette flowers) along with larvae.

| ODISHA                                                                           |           | Actual Rainfall in last week(mm) |    |                |    |                   |      |    | Predicted Rainfall in next week (mm) |     |     |                     |      |
|----------------------------------------------------------------------------------|-----------|----------------------------------|----|----------------|----|-------------------|------|----|--------------------------------------|-----|-----|---------------------|------|
|                                                                                  |           | August                           |    |                |    |                   |      |    | August                               |     |     |                     |      |
|                                                                                  |           | 18                               | 19 | 20             | 21 | 22                | 23   | 24 | 26                                   | 27  | 28  | 29                  | 30   |
|  | Koraput   | 0                                | 0  | 0              | 0  | 0                 | 0    | 0  | 3.3                                  | 4.2 | 6.8 | 10.8                | 10.8 |
|                                                                                  | Kalahandi | 23                               | 7  | 5              | 0  | 1                 | 34   | 0  | 6.6                                  | 5.7 | 8.8 | 16.2                | 19.1 |
|                                                                                  | Balangir  | 7.6                              | 0  | 10             | 0  | 3.2               | 77.2 | 0  | 8.6                                  | 11  | 12  | 16.7                | 22.8 |
| Amount of rainfall & colour Code                                                 |           | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |      |    | 64.5 to 115.5 mm                     |     |     | 115.6 to 204.4      |      |
| Rainfall category                                                                |           | Very light rainfall              |    | Light rainfall |    | Moderate rainfall |      |    | Heavy rainfall                       |     |     | Very heavy rainfall |      |

#### Crop Condition:

In Odisha, the crop is 50 to 54 days old at square formation to flowering stage. Continuous rains due to low pressure development hampered the regular cultural operations in the major cotton growing districts like Kalahandi, Balangir and Rayagada. Drained excess rain water from fields to protect the crop from problem caused by water logging like root rot wilting and reddening of leaves, Application of third dose of fertilizer and spraying of neem-based pesticide (1500 ppm) for prevention of sucking pests like aphids and other foliage feeders like *Spodoptera* and semi-loopers were taken up during the reporting period. All types of weeds, i.e., broad leaf, grasses and sedges, were noticed in most of the cotton fields. Mechanical weeding and earthing up were carried out by tractor and bullock-drawn ploughs. Infestation of aphids, jassids, *Spodoptera*, semi-loopers and leaf miners were reported from some areas but below ETL. Wilting and leaf reddening were reported from some places due to continuous rains and waterlogging conditions.

#### Advisory:

Farmers are advised to maintain proper drainage in cotton fields. Complete intercultural operations, weeding and earthing up, incorporation of green manuring crops manually or by ploughing by bullocks, first top dressing of fertilizer with 50% N and 50% K. Apply micronutrients if not applied as basal dose @ ZnSO<sub>4</sub> (25 kg/ha) and Boron (5 kg Borax/ha) at the time of earthing up. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriithobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriithobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Regularly monitor the crop to know about the incidence of any pests and diseases. To prevent sucking pests like aphids, jassids and thrips, spray neem-based pesticide @ one litre per acre in 200 litres of water. After 60 DAS of crop stage, spray Buprofezin @ 20 ml/10 litre of water when aphid population is above ETL (≥2 affected plants counted randomly showing symptoms cupping / crumpling of few leaves on the upper portion of plant (10% plants infested). To monitor *Spodoptera* infestation, install pheromone traps @ 5 numbers/ha. If parawilt or sudden wilt occurs due to heavy rain and waterlogging after a dry spell, spray Cobalt chloride @10 mg/litre (10 ppm) or 2-3 drenching with solutions of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development on affected plants. Spray the crop with 100g Magnesium sulphate mixed with 100g Urea in 10 litres of water in waterlogged areas to reduce leaf reddening conditions. Drench early symptomatic and surrounding plants with *Trichoderma* spp. 1% WP @50 g or Carbendazim 50% WP @ 12 g/ 10 litres of water to manage root-rot and wilt diseases.

| GUJARAT                                                                            |               | Actual Rainfall in last week(mm) |    |                |     |                   |    |     | Predicted Rainfall in next week (mm) |     |     |                     |     |
|------------------------------------------------------------------------------------|---------------|----------------------------------|----|----------------|-----|-------------------|----|-----|--------------------------------------|-----|-----|---------------------|-----|
|                                                                                    |               | August                           |    |                |     |                   |    |     | August                               |     |     |                     |     |
|                                                                                    |               | 18                               | 19 | 20             | 21  | 22                | 23 | 24  | 26                                   | 27  | 28  | 29                  | 30  |
|  | Amreli        | 0                                | 0  | 0              | 0   | 0                 | 0  | 0   | 1.5                                  | 1.5 | 0.5 | 0.3                 | 0.5 |
|                                                                                    | Bhavnagar     | 1.4                              | 0  | 0              | 0   | 2                 | 0  | 0   | 0.1                                  | 0   | 0.2 | 0.3                 | 0.5 |
|                                                                                    | Jamnagar      | 0                                | 0  | 0              | 0   | 0                 | 0  | 0   | 0.2                                  | 0.2 | 0.4 | 0.4                 | 0.6 |
|                                                                                    | Rajkot        | 0                                | 0  | 0              | 0   | 0                 | 0  | 0   | 0.2                                  | 0.1 | 0.4 | 0.5                 | 0.7 |
|                                                                                    | Junagadh      | 1.4                              | 0  | 0              | 0   | 1                 | 0  | 0   | 0.6                                  | 0.6 | 0.9 | 1.3                 | 1.6 |
|                                                                                    | Sabarkantha   |                                  |    |                |     |                   |    |     | 1.2                                  | 1.1 | 2.2 | 0.2                 | 0.6 |
|                                                                                    | Surendranagar | 0                                | 0  | 0              | 0   | 0                 | 0  | 0   | 0                                    | 0.1 | 0.1 | 0.2                 | 0.3 |
|                                                                                    | Ahmedabad     | 3.6                              | 0  | 0              | 0.2 | 2                 | 0  | 2.5 | 0.1                                  | 0.1 | 0.1 | 0.2                 | 0.3 |
|                                                                                    | Baroda        | 0.6                              | 0  | 0              | 0   | 0                 | 0  | 0   | 1.3                                  | 1.7 | 0.2 | 0.5                 | 0.9 |
|                                                                                    | Patan         |                                  |    |                |     |                   |    |     | 0                                    | 0   | 0.2 | 0.3                 | 0.6 |
|                                                                                    | Mehesana      |                                  |    |                |     |                   |    |     | 0.2                                  | 0.2 | 0.8 | 0.2                 | 0.6 |
| Amount of rainfall & colour Code                                                   |               | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |     | 15.6 to 64.4 mm   |    |     | 64.5 to 115.5 mm                     |     |     | 115.6 to 204.4      |     |
| Rainfall category                                                                  |               | Very light rainfall              |    | Light rainfall |     | Moderate rainfall |    |     | Heavy rainfall                       |     |     | Very heavy rainfall |     |

### Crop Condition:

At Surat, the sown crop is in the vegetative growth stage. Weeding and first/ second dose of fertilizer application were given that was not applied due to continuous rains. Weeds like Chido (*Cyperus rotundus*), Satodi (*Trianthema monogyna*), Dhamdo (*Amaranthus viridis*) and others have infested the fields. Thrips were above ETL but leaf hoppers below ETL. Parawilt disease has been recorded in some fields.

At Junagadh, the sown crop is 49 days old at vegetative growth stage. Intercultural operations and weeding were done during the reporting period. Kharif weeds (*Echinochloa colona*, *Cyperus rotundus*, and *Setaria glauca*) have infested the cotton fields. Infestation of thrips and jassids were noticed at many places and above ETL at few locations.

### Advisory:

At Surat, farmers are advised to carry out field sanitation. In case of heavy rain, drain out the excess rainwater from cotton fields. Cotton crop requires 240-40-00 NPK/ ha. Dose of Nitrogen is applied after sowing @ 30, 60, 75, 90 and 105 days in equal splits. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriithiobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @0.84 ml/litre or Profenophos 50 EC @ 2 ml/ litre of water. Check *Fusarium* wilt patches along with one-meter radius of healthy plants in desi cotton fields with suitable fungicide application. For the control of wilt and root rot disease, give spot application of Carbendazim 50% WP@ 1.2 g per litre of water or *Trichoderma harzianum* or *T. viride* 1% WP@10 g/ litre of water. If parawilt is observed, apply 2-3 drenchings with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. On receiving sufficient rain, apply second instalment of split dose of nitrogenous fertilizer application. Complete the dose of Phosphorous, if not applied as a basal dose

At Junagadh, farmers are advised to remove excess water from the cotton fields. Give top dressing of Ammonium sulphate 10 kg per acre or Urea at 15 kg/acre. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriithiobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @0.84 ml/litre or Profenophos 50 EC @ 2 ml/ litre of water. In case of jassid exceeding ETL, spray any one of these insecticides: Buperfezin 25 EC @ 1.25 litre/ha or Diafenthiuron 50 WP @625 g/ha or Flonicamid 50 WG @200 g/ha. Manage parawilt damage by spraying water soluble fertilizer (13-0-45, N-P-K) @ 100 g in 10 litres water and drench the affected plants 2-3 times at weekly interval with Copper oxychloride 50 WP @ 25 g or drench with solution of Carbendazim 50 WP@100 g plus Urea 2 kg/100 liter of water immediately after symptom appearance. For the management of wet weather blight and boll rot, foliar sprays of (Carbendazim 12%+Mancozeb 63% WP) @ 30 g or Propiconazole 25% EC @10 ml or (Azoxystrobin 18.2% w/w+Difenoconazole 11.4% w/w SC) @ 10 ml or (Pydiflumetofen 13.6% w/w + Propiconazole 11.4% w/w SE) @12 ml or (Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC) @ 6 ml in 10 litres of water is recommended..

| MADHYA PRADESH                                                                     |          | Actual Rainfall in last week(mm) |     |                |     |                   |     |    | Predicted Rainfall in next week (mm) |     |                     |     |     |
|------------------------------------------------------------------------------------|----------|----------------------------------|-----|----------------|-----|-------------------|-----|----|--------------------------------------|-----|---------------------|-----|-----|
|                                                                                    |          | August                           |     |                |     |                   |     |    | August                               |     |                     |     |     |
|                                                                                    |          | 18                               | 19  | 20             | 21  | 22                | 23  | 24 | 26                                   | 27  | 28                  | 29  | 30  |
|  | Khargaon | 0                                | 0   | 0              | 0   | 0                 | 0   | 0  | 22                                   | 5.6 | 2.3                 | 0.5 | 0.4 |
|                                                                                    | Dhar     | 8                                | 0.4 | 2.1            | 0.5 | 0                 | 0.3 | 0  | 24                                   | 8   | 1.9                 | 0.5 | 0.5 |
|                                                                                    | Khandwa  | 0                                | 0   | 0              | 0   | 0                 | 0   | 0  | 26                                   | 8.7 | 6.3                 | 1.8 | 0.2 |
| Amount of rainfall & colour Code                                                   |          | 0.1 to 2.4 mm                    |     | 2.5 to 15.5 mm |     | 15.6 to 64.4 mm   |     |    | 64.5 to 115.5 mm                     |     | 115.6 to 204.4      |     |     |
| Rainfall category                                                                  |          | Very light rainfall              |     | Light rainfall |     | Moderate rainfall |     |    | Heavy rainfall                       |     | Very heavy rainfall |     |     |

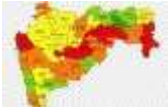
### Crop Condition:

At Khandwa, the sown crop is 42 to 90 days old in its vegetative and boll development growth stage. The weather was cloudy with no rains during the reporting period. Spot weeding, fertigation, irrigation was given wherever required. Seasonal weeds like *Cynodon dactylon*, *Cyperus rotundus*, *Argemone maxicana* and *Phyllanthus niruri*. have infested the fields. Incidence of jassids, aphids and whiteflies have been observed in some fields. No incidence of diseases reported so far.

### Advisory

At Khandwa, farmers are advised to take up weeding where the crop has completed more than 76 days of its age. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broadleaved weeds. Install pheromone traps @2 / acre to monitor pink bollworm. Give a split dose of Nitrogen @ 25% applied by column method at the depth of 10 to 15 cm. Apply NSKE 5% + Neem oil 5 ml/litre or neem oil-based formulations (300 or 1500 ppm) 5 ml/litre + 1.0 g laundry detergent emulsion

to control sucking pests. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development.

| MAHARASHTRA                                                                      |                    | Actual Rainfall in last week(mm) |     |                |    |                   |      |                | Predicted Rainfall in next week (mm) |                     |     |     |     |
|----------------------------------------------------------------------------------|--------------------|----------------------------------|-----|----------------|----|-------------------|------|----------------|--------------------------------------|---------------------|-----|-----|-----|
|                                                                                  |                    | July/ August                     |     |                |    |                   |      |                | August                               |                     |     |     |     |
|                                                                                  |                    | 18                               | 19  | 20             | 21 | 22                | 23   | 24             | 26                                   | 27                  | 28  | 29  | 30  |
|  | Dhule              |                                  |     |                |    |                   |      |                |                                      |                     |     |     |     |
|                                                                                  | Nandurbar          |                                  |     |                |    |                   |      |                | 3.6                                  | 4.2                 | 0.4 | 0.4 | 0.4 |
|                                                                                  | Jalgaon            |                                  |     |                |    |                   |      |                | 3.6                                  | 4.5                 | 0.8 | 0.8 | 1.5 |
|                                                                                  | Ahilyanagar        | 6                                | 0   | 0              | 0  | 0                 | 0    | 0              | 4.7                                  | 7                   | 0.6 | 0.3 | 0.3 |
|                                                                                  | Ch. Sambhaji Nagar | 0.1                              | 0   | 0              | 0  | 2.7               | 0    | 0              | 1                                    | 1                   | 0.8 | 0.8 | 0.8 |
|                                                                                  | Jalna              | 3.2                              | 0.4 | 2.8            | 0  | 0.4               | 0.7  | 1              | 3.8                                  | 3.6                 | 0.5 | 0.3 | 0.4 |
|                                                                                  | Beed               | 0                                | 0   | 0              | 0  | 0                 | 0    | 0              | 5.2                                  | 3.2                 | 0.4 | 0.2 | 0.4 |
|                                                                                  | Nanded             |                                  |     |                |    |                   |      |                | 1.6                                  | 0.9                 | 0.3 | 0.2 | 0.5 |
|                                                                                  | Parbhani           |                                  |     |                |    |                   |      |                | 4.4                                  | 4.6                 | 1.8 | 1.6 | 0.4 |
|                                                                                  | Hingoli            | 0                                | 0   | 0              | 0  | 0                 | 5    | 0              | 4.9                                  | 3.7                 | 0.7 | 0.4 | 0.2 |
|                                                                                  | Buldhana           |                                  |     |                |    |                   |      |                | 5.2                                  | 3.9                 | 1.5 | 0.5 | 0.3 |
|                                                                                  | Akola              | 0                                | 4   | 0              | 0  | 0                 | 0    | 0              | 6                                    | 5.5                 | 3.2 | 0.3 | 0.2 |
|                                                                                  | Washim             | 1                                | 0.1 | 0              | 0  | 0                 | 0    | 0              | 6.7                                  | 5.1                 | 7.5 | 0.2 | 0.3 |
|                                                                                  | Amravati           | 0.8                              | 0   | 0              | 0  | 0                 | 0    | 0              | 4.3                                  | 4.4                 | 4   | 0.5 | 0.4 |
|                                                                                  | Yavatmal           | 0                                | 0   | 0              | 0  | 0                 | 0    | 2              | 12                                   | 8.1                 | 8.8 | 1.6 | 0.3 |
|                                                                                  | Wardha             | 2                                | 0   | 0              | 0  | 4                 | 0    | 0              | 4.1                                  | 4.7                 | 6.2 | 2.4 | 0.5 |
|                                                                                  | Nagpur             | 0                                | 0   | 0              | 0  | 0                 | 11.2 | 1              | 8.9                                  | 7.2                 | 6.1 | 3.3 | 0.2 |
|                                                                                  | Chandrapur         | 0                                | 0   | 0.5            | 0  | 12.5              | 2.2  | 3.5            | 10                                   | 14                  | 8.3 | 5   | 0.5 |
| Amount of rainfall & colour Code                                                 |                    | 0.1 to 2.4 mm                    |     | 0              |    | 1                 |      | 0              |                                      | 0                   |     | 0   |     |
| Rainfall category                                                                |                    | Very light rainfall              |     | Light rainfall |    | Moderate rainfall |      | Heavy rainfall |                                      | Very heavy rainfall |     | 0   |     |

#### Crop Condition:

At Akola, the sown crop is 50 to 55 days old at vegetative stage. Hoeing and weeding operations were taken up. Weedicide sprays are also going on in weed-infested fields. Some grassy weeds particularly *Cyperus rotundus* and *Cyperus rotundus* are prominent weeds with some broadleaf weeds observed in cotton fields. Some cotton fields are heavily infested with *Commelina* weed species. Sucking pests were noticed in some fields but below ETL.

In a recent survey conducted by a team of scientists from ICAR-CICR, Nagpur, severe incidence of *Fusarium* wilt and *Microphomina* root rot diseases was observed in some pockets of Buldana and Akola Districts due to long dry spell and associated moisture stress.

At Rahuri, the sown irrigated cotton crop is 50 to 85 days at square formation, flowering and boll development stages based on the time sown. Irrigation, hoeing, weeding, spraying and fertilizer application were done. Weeds like *Parthenium*, *Haryali*, *Lavala*, *Dudhi*, *Kena*, *Nagarnotha*, *chandvel*, etc., have infested the fields. Sucking pests have crossed ETL in many fields. *Mylocerus* weevil has damaged 1-2% cotton plants. No incidence of bollworms TSV has been recorded at a few places.

At Nanded, the sown crop is 46 to 71 days at square formation to boll formation stage. Intercultural operations, weeding, fertilizer application and plant protection are in progress. Grassy weeds like *Digitaria* sp., *Echinochloa crusgalli*, *Setaria* sp., broad-leaved weeds like *Amaranthus*, *Protulaca*, *chenopodium*, *convolvulus* sp, *Parthenium*, *Phyllanthus niruri*, *Trianthema monogyna*, and sedges: *Cynadon* and *cyperus* have infested the fields. Jassids and aphids incidence were noticed but below ETL.

#### Advisory:

At Akola, farmers are advised to open the furrows in the cotton field for moisture conservation purposes at 45-50 DAS. Carry out intercultural operations like hoeing and weeding in cotton. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Apply first split of 40 Kg Nitrogen (90 Kg Urea per ha) for irrigated hybrid cotton and 45 Kg N (97 Kg urea per ha) for rainfed hybrid/hirsutum cotton as top-dressing dose of chemical fertilizer. Apply NSKE 5% + Neem oil 5 ml/litre

or neem oil-based formulations (300 or 1500 ppm) 5 ml/litre + 1.0 gm laundry detergent emulsion to control sucking pests like aphids, jassids and thrips, and also to repel pink bollworm females from ovipositing on cotton squares. To monitor pink bollworms, install 2 pheromone traps per acre for surveillance purposes in the field. Observe 20 plants per acre as a representative of the cotton field for pest infestation. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development.

In *Fusarium* wilt and *Microphomina* root rot affected areas, farmers are advised to uproot the infected plants and destroy them immediately to prevent the spread of disease. Drench the surrounding plants with **Carbendazim 50% WP @ 1.2 g/L of water** to prevent further spread. This should be followed by **two drenches of *Trichoderma harzianum* or *T. viride* @ 5 g/L of water at 15-day intervals**.

At Rahuri, farmers are advised to apply second split dose at 60 DAS. Keep the crop weed-free by hand hoeing or intercultural operations with a tractor or bullock operated implements. Remove *Parthenium* weed from the field and field bunds so as to avoid or to minimize TSV and thrips incidence. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothiac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothiac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Monitor the fields to keep a check on the infestation of sucking pests. Install yellow sticky traps, spray homemade neem seed kernel extract (NSKE) 5% or Azadirachtin 10000 ppm 10 ml/10 litres of water. In cotton crops above 60 DAS, if sucking pests cross ETL, spray Flonicamid 50 WG 2g/10 lit water or Buprofezin 25 SC @ 20 ml /10 litres of water. Install pheromone traps @ 5 /ha to monitor pink bollworm and collect and destroy the rosette flowers along with PBW larva at regular intervals to avoid further generation of pink bollworm. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40–45-day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. Farmers having closer spacing (90 x 30 cm) cotton but not willing to spray PGR can go for removal of monopodia at 45 days after sowing and detopping at 75 to 80 days. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Manage thrips (>ETL) incidence with recommended use of insecticides.

At Nanded, farmers are advised to take up intercultural operations and weeding to manage weeds. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothiac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothiac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Give top dressing of Nitrogen @ 60 kg per ha to irrigated crops at 60 DAS whereas Nitrogen @ 48 kg/ha at 30 DAS to rainfed crop by drilling or ring method. Avoid broadcasting urea. Spray growth retardant, Mepiquat Chloride 5 % @ 500 ml/ha, at square formation stage in Bt cotton planted under HDPS and closer spacing cotton fields. Give foliar spray of NSKE 5% to manage sucking pests at 30 DAS. In crop of > 60 DAS, go for foliar application of Buprofezin 20 SC @ 1000 ml /ha or Dinotefuron 20 SG @ 150 g per ha to manage sucking pests once it crosses ETL. Field and field bunds should be kept weed-free and *Parthenium* weed should be removed in and around the fields to minimize the thrips population build-up and TSV incidence. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g or Carbendazim 50%WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. For the management of leaf spots and boll rot, foliar sprays of (Carbendazim 12%+Mancozeb 63% WP) @ 30 g or Propiconazole 25% EC @10 ml or (Azoxystrobin 18.2% w/w+Difenoconazole 11.4% w/w SC) @ 10 ml or (Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC) @ 6 ml in 10 litres of water is recommended.

| TELANGANA                                                                          |              | Actual Rainfall in last week(mm) |     |                |    |                   |    |     | Predicted Rainfall in next week (mm) |     |                     |     |     |
|------------------------------------------------------------------------------------|--------------|----------------------------------|-----|----------------|----|-------------------|----|-----|--------------------------------------|-----|---------------------|-----|-----|
|                                                                                    |              | August                           |     |                |    |                   |    |     | August                               |     |                     |     |     |
|                                                                                    |              | 18                               | 19  | 20             | 21 | 22                | 23 | 24  | 26                                   | 27  | 28                  | 29  | 30  |
|  | Adilabad     | 0                                | 2   | 0              | 0  | 0                 | 22 | 2   | 4.3                                  | 5.2 | 5.2                 | 3.8 | 0.6 |
|                                                                                    | Warangal     | 19                               | 8   | 0              | 0  | 0                 | 20 | 4   | 6.8                                  | 4.8 | 2.2                 | 1.2 | 3.1 |
|                                                                                    | Khammam      | 0                                | 3   | 10             | 0  | 0                 | 2  | 20  | 2.5                                  | 3.8 | 1.5                 | 0.4 | 2.5 |
|                                                                                    | Karimnagar   | 12.2                             | 7.2 | 0              | 0  | 0                 | 21 | 2.8 | 5.1                                  | 2.2 | 1.9                 | 1   | 0.9 |
|                                                                                    | Mahabubnagar | 1                                | 0   | 0              | 0  | 0                 | 2  | 33  | 0.7                                  | 1.1 | 1.4                 | 0.3 | 0.1 |
| Amount of rainfall & colour Code                                                   |              | 0.1 to 2.4 mm                    |     | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |    |     | 64.5 to 115.5 mm                     |     | 115.6 to 204.4      |     |     |
| Rainfall category                                                                  |              | Very light rainfall              |     | Light rainfall |    | Moderate rainfall |    |     | Heavy rainfall                       |     | Very heavy rainfall |     |     |

**Crop Condition:**

At Adilabad, the sown crop is at 53 to 58 days at squaring to flowering stage. Third split dose of top dressing with N:P:K @ 25kg Urea + 10Kg Potash was given. Inter cultural operations, weeding and insecticide spray were taken up during the reporting period. Sucking pest incidence was observed in most of the fields. No incidence of diseases

At Warangal, the crop is 63 to 74 days old at vegetative to flowering stage. Manual line weeding/Inter-cultivation with Bullock drawn Danti or Guntaka and insecticide sprays to control sucking pests were carried out. Weeds have infested the fields. Thrips, aphids and jassids were noticed above ETL. No incidence of disease.

**Advisory:**

At Adilabad, farmers are advised to take up periodical hoeing for moisture conservation and weed control. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Give prophylactic spray of neem-based insecticide @ 5 ml per litre of water at 45 DAS to control sucking pests and deterring pink bollworm females from egg laying on newly formed squares. If the population of sucking pests exceeds ETL, give a spray of Flonicamid 50 WG @ 0.4 g per litre of water.

At Warangal, farmers are advised to give top dressing of Nitrogen (25 kgs of Urea/acre) and Potassic (10 kgs MOP/acre) fertilizers at 40,60 and 80 DAS after receipt of rains in rainfed crops with sufficient moisture. With respect to weed control, in case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Prophylactic spray of neem-based insecticide @ 5 ml per litre of water at 45 DAS may be given for controlling sucking pests and deterring pink bollworm females from egg laying on newly formed squares. If population of sucking pests exceeds ETL, spray Flonicamid 50 WG @ 0.4 or Diafenthiuron 50 WP @ 1.25 g or Dinotefuron 20 SG @ 0.4g per litre of water from 60 DAS onwards. Install yellow- and blue-colored sticky traps (10 each per acre) as a preventive measure to monitor and control the sucking pest complex. Dry conditions are favorable for the incidence of pink bollworm. So, monitor the incidence of the pest by arranging pheromone traps (4 No./Acre) in the cotton fields

| ANDHRA PRADESH                                                                     |          | Actual Rainfall in last week(mm) |    |                |    |                   |     |    | Predicted Rainfall in next week (mm) |     |                     |     |     |
|------------------------------------------------------------------------------------|----------|----------------------------------|----|----------------|----|-------------------|-----|----|--------------------------------------|-----|---------------------|-----|-----|
|                                                                                    |          | August                           |    |                |    |                   |     |    | August                               |     |                     |     |     |
|                                                                                    |          | 18                               | 19 | 20             | 21 | 22                | 23  | 24 | 26                                   | 27  | 28                  | 29  | 30  |
|  | Guntur   | 0                                | 3  | 1              | 0  | 0                 | 6   | 6  | 1.1                                  | 0.4 | 0.5                 | 0.1 | 0.3 |
|                                                                                    | Prakasam | 0                                | 0  | 0              | 0  | 0                 | 0.3 | 6  | 0.4                                  | 0.2 | 0.8                 | 0.2 | 0.1 |
| Amount of rainfall & colour Code                                                   |          | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |     |    | 64.5 to 115.5 mm                     |     | 115.6 to 204.4 mm   |     |     |
| Rainfall category                                                                  |          | Very light rainfall              |    | Light rainfall |    | Moderate rainfall |     |    | Heavy rainfall                       |     | Very heavy rainfall |     |     |

**Crop Condition:**

At Guntur, sowings are almost completed. Preparatory cultivation and field cleaning are completed in the rest of the fields, ready to sow once sufficient rains of 60-75 mm is received.

At Nandyal, the sown crop is 45 to 75 days old at squaring and flowering stages. Advised to go for sowing after receipt of good rainfall of 70-80 m.m in week duration in adequate soil moisture and to spray Urea @ 10 g/lit of water to tide over temporary dry spells. Top dressing of fertilizer application was given.

**Advisory**

At Guntur, farmers to manage soil borne diseases, at the time of sowing are advised to treat the seed with Carboxin 37.5% + Thiram 37.5% DS @ 3.5 g per kg of seeds (root rot and bacterial blight disease) or Fluxapyroxad (333 g/lit FS) @ 1.5 ml/kg seed or Tetraconazole 11.6% w/w (12.5% w/v) SL @ 1.5 ml/kg of seeds for seed-borne diseases (for root rot disease) as well as biofertilizers, viz., Azotobacter, PSB and KMB @ 10 ml per kg seed or *Trichoderma harzanium* 2.5 kg/ha enriched with 100 kg FYM. Sow the crop after receipt of at least 80-100 mm of rainfall to avoid germination-related problems. Do not take up dry sowings. Use Pendimethalin 38.7 CS @ 700 ml/acre in 200 litres of water as pre-emergence weedicide to control weeds in the early stage of the crop. Do not take up pre-emergence applications in dry soil conditions. Take up basal application of P2O5 @ 60 kg/acre and 50 kg N and 20 Kg K2O per acre within 30 DAS. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. As a prophylactic measure against sucking pests and to check the initial pink bollworm infestation, neem-based insecticides may be sprayed at 1 litre per acre using 200 litres of water.

At Nandyal, farmers are advised to go for a spray of Urea or 13-0-45 @ 10 g/lit of water to tide over temporary dry spells. To manage sucking pests, spray neem oil @ 1 litre per acre (in 200 litres of water). Remove weeds on the bunds to avoid transmission of TSV virus.

| KARNATAKA                                                                        |         | Actual Rainfall in last week(mm) |     |                |    |                   |     |    | Predicted Rainfall in next week (mm) |     |     |                     |     |
|----------------------------------------------------------------------------------|---------|----------------------------------|-----|----------------|----|-------------------|-----|----|--------------------------------------|-----|-----|---------------------|-----|
|                                                                                  |         | August                           |     |                |    |                   |     |    | August                               |     |     |                     |     |
|                                                                                  |         | 18                               | 19  | 20             | 21 | 22                | 23  | 24 | 26                                   | 27  | 28  | 29                  | 30  |
|  | Dharwad | 0.2                              | 1.4 | 3.2            | 0  | 2.4               | 0.4 | 0  | 1.7                                  | 1   | 0.9 | 1.2                 | 0.5 |
|                                                                                  | Haveri  | 1                                | 3   | 6              | 0  | 4                 | 3   | 1  | 2.1                                  | 1.3 | 1   | 1.1                 | 0.8 |
|                                                                                  | Mysore  | 1                                | 28  | 0              | 0  | 0                 | 1   | 10 | 4                                    | 1.9 | 0.2 | 0.5                 | 0.3 |
| Amount of rainfall & colour Code                                                 |         | 0.1 to 2.4 mm                    |     | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm   |     |    | 64.5 to 115.5 mm                     |     |     | 115.6 to 204.4 mm   |     |
| Rainfall category                                                                |         | Very light rainfall              |     | Light rainfall |    | Moderate rainfall |     |    | Heavy rainfall                       |     |     | Very heavy rainfall |     |

#### Crop Condition:

At Dharwad, the crop is 57 to 62 days at flowering to boll formation stage. Sporadic rainfall received in surrounding locations. Hand weeding and inter cultivation for weed management were taken up. Weeds infestation was noticed in certain fields. Shoot weevil, leaf hopper and aphids have infested the fields in low status but thrips in moderate status. *Alternaria* blight disease was reported in certain fields.

At Raichur, the sown crop is 59 days old at the squaring stage. Non receipt of rainfall is resulting in withering of cotton plants with various magnitudes, though the early sown crop is withstanding drought. Overall, 25-30 % cotton area is under irrigation. Inter cultivation operation has been taken up along with sprays for sucking pest control. Thrips and mealy bug incidence were reported above ETL.

At Chamarajanagar, the crop is 86 to 101 days from boll formation to boll development stage. Top dressing with Urea fertilizer, weeding, inter-cultivation, and earthing up work operations were done. Incidence of leaf hopper – (4-6/3 leaves), aphids – (25-40/3 leaves) and PBW incidence below 5% were recorded.

#### Advisory:

At Dharwad, farmers are advised to take up hand weeding and intercultural operations to manage weeds. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Do hand collection of shoot weevils from the okra as a trap crop. Apply Phosphorous and Potash by ring method. Spray neem-based insecticide @ 5.0 ml per litre of water to manage sucking pests. After 60 DAS of crop age, spray Flonicamid 50 WG @ 0.4g per litre or Difenthiuron 50 WP @ 1.2 g per litre of water to manage sucking pests if crosses ETL. Install pheromone traps @ 2 /acre to monitor pink bollworm moth activity.

At Raichur, farmers are advised to take up weeding and intercultural on priority basis to avoid the land getting dried up. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds when the crop is at 25-30 days duration. Spray the recommended dose of Flonicamid 50% WG (4 g/ 10 litres of water) against sucking pest populations that exceed ETL. Spray Profenophos 50 EC @ 2.5 ml or Imidacloprid 17.8 SL @ 0.3 ml per litre of water to control mealy bug infestation

At Chamarajanagar, farmers are advised to install yellow sticky traps @ 8-12 per acre and pheromone traps, change of lures @ 15 days interval to monitor sucking pests. Spray Flonicamid 50% WG 0.4 ml /lt of water or Dinotefuran 20 SG @ 0.3 gm/lt of water and Imidacloprid 17.8 SL @ 0.5 ml /lt of water to control sucking pests above ETL. Spray Profenophos 50 EC @ 500 ml per acre or Emamectin benzoate 5SG @100 gm per acre or Indoxacarb 15 EC @ 200 ml per acre, if the incidence of pink bollworm is above 5 per cent (ETL) in flowers or green bolls.

| TAMIL NADU                                                                         |              | Actual Rainfall in last week(mm) |    |                |    |                 |    |    | Predicted Rainfall in next week (mm) |     |     |                   |     |
|------------------------------------------------------------------------------------|--------------|----------------------------------|----|----------------|----|-----------------|----|----|--------------------------------------|-----|-----|-------------------|-----|
|                                                                                    |              | August                           |    |                |    |                 |    |    | August                               |     |     |                   |     |
|                                                                                    |              | 18                               | 19 | 20             | 21 | 22              | 23 | 24 | 26                                   | 27  | 28  | 29                | 30  |
|  | Perambalur   | 0                                | 0  | 22.2           | 0  | 0               | 0  | 0  | 0.9                                  | 0.8 | 0   | 0.2               | 0.1 |
|                                                                                    | Salem        | 0                                | 0  | 3              | 0  | 0               | 0  | 3  | 1.4                                  | 1.4 | 0.2 | 0.2               | 0.2 |
|                                                                                    | Trichy       |                                  |    |                |    |                 |    |    | 1.2                                  | 1.2 | 0.1 | 0.2               | 0.3 |
|                                                                                    | Virudhunagar | 0                                | 0  | 0              | 0  | 0               | 0  | 0  | 1                                    | 1.2 | 0.8 | 0.3               | 0.2 |
| Amount of rainfall & colour Code                                                   |              | 0.1 to 2.4 mm                    |    | 2.5 to 15.5 mm |    | 15.6 to 64.4 mm |    |    | 64.5 to 115.5 mm                     |     |     | 115.6 to 204.4 mm |     |

| Rainfall category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Very light rainfall | Light rainfall | Moderate rainfall | Heavy rainfall | Very heavy rainfall |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|-------------------|----------------|---------------------|
| <p><b>Crop Condition:</b><br/>           At Coimbatore and surrounding areas, sowing has been initiated. The sown crop is at the initial growth stage. Pre-emergence application of Pendimethalin (38.7% CS) @ 260 ml/ac or Pendimethalin (30%EC) @ 400 ml/ac was practiced within three DAS as recommended. During field preparation, soil application of <i>Trichoderma viride</i> and <i>Bacillus subtilis</i> @ 2.5 kg/ha along with 500 kg well decomposed FYM was carried out. During sowing, delinted seeds were treated with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed or Thiram 75 WP @ 2.5 g/kg of seed to manage soil borne diseases in case of Non-Bt seeds. Leaf miner incidence has been noticed and initiated. prophylactic spray of neem oil 3% as recommended.</p> <p>At Srivilliputhur and surrounding areas, field preparation is in progress. Sowing will start by the end of August month.</p> <p><b>Advisory</b><br/>           At Coimbatore and surrounding areas, farmers are advised to take up <i>kharif</i> sowing at the earliest possible. Sow the crop after receipt of at least 80-100 mm rainfall to avoid germination-related problems. Regulate irrigation based on soil type and receipt of rainfall. Clean the bunds and irrigation channels and maintain them properly to ensure drainage during excess rains. Give pre-emergence application of Pendimethalin (38.7% CS) @ 700 ml/ac or Pendimethalin (30%EC) @ 1000 ml/ac within two DAS. Take up gap filling on the tenth DAS. Regularly monitor the crop for incidence of pests and diseases to adopt timely management. Select medium-duration hybrids.</p> <p>At Srivilliputhur, farmers are advised to remove and destroy previous cotton crop stubbles to avoid stem weevil and root rot infestation. Trim the bunds and bring the field in good tilth condition by using a rotavator. Form ridges and furrows at 75 cm and 45 cm spacing for irrigated and rainfed cotton, respectively. Follow crop rotation where heavy infestation of stem weevil and boll worm complex are prominent. During final plough, apply neem cake @250 kg/ha to prevent stem weevil infestation. Clean the farm bunds and other premises to destroy the alternate host of insect pests such as <i>Abutilon</i> and other grassy weeds. Use the rainfall for field preparation and sowing cotton.</p> |                     |                |                   |                |                     |

The detailed information regarding cotton production technology, e.g., selection of soil, varieties, fertilizer application, sowing methods, irrigation systems, management of weeds, insect pests and diseases, etc., can be availed from an Android-based **CICR Cotton App** developed by ICAR-CICR, Nagpur. The app can be downloaded free of cost from Google Play Store. Additionally, the crop growth stage-specific and weather-based weekly advisories are uploaded on the website of ICAR-CICR (<https://cicr.org.in/resource-weekly-advisory>) also to be consulted for the benefit of farmers.

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