## **ICAR-Central Institute for Cotton Research**

## Weekly Advisory for Cotton Cultivation from 13<sup>th</sup> to 18<sup>th</sup> October 2015 "The advisory is based on inputs received from the State Agricultural Universities of the respective state

## **WEATHER ADVISORY**

|                | Rainfall (mm) Oct 2015 |    |    |    |    |    |  |  |  |  |  |  |  |
|----------------|------------------------|----|----|----|----|----|--|--|--|--|--|--|--|
| Date           | 13                     | 14 | 15 | 16 | 17 | 18 | ADVISORY   |  |  |  |  |  |  |
| PUNJAB         |                        |    |    |    |    |    | The crop is in boll formation and boll opening stage. Picking have been started in <i>G.arboreum</i> and in <i>G.hirsutum</i> cotton. No new   |  |  |  |  |  |  |
| Batinda        | 0                      | 0  | 0  | 0  | 0  | 0  | weeds emerged but weedy conditions still prevailed.Incidence of leafhopper incidence (1.2-1.8/3leaves), whitefly (14.6-18.8/3leaves)   |  |  |  |  |  |  |
| Ferozepur      | 0                      | 0  | 0  | 0  | 0  | 0  | and thrips (0.0/3 leaves) were observed. Parawilt observed. Population of leafhopper and thrips is negligible. Whitefly incidence is   |  |  |  |  |  |  |
| Muktsar        | 0                      | 0  | 0  | 0  | 0  | 0  | increasing and the second flush /peak of whitefly started. Spotted bollworm incidence has been noticed in G.arboreum cotton at few   |  |  |  |  |  |  |
| Mansa          | 0                      | 0  | 0  | 0  | 0  | 0  | places. Since picking in cotton has started, farmers are advised to adopt clean picking practices. Care must be taken while uprooting  |  |  |  |  |  |  |
| HARYANA        |                        |    |    |    |    |    | and destroying the cotton stalks especially from abandoned fields. Farmers are advised to stop irrigation and follow clean picking   |  |  |  |  |  |  |
| Sirsa          | 0                      | 0  | 0  | 0  | 0  | 0  | practices. In Rajasthan, the crop is in flowering and boll bursting stage. Among sucking pests, the population of jassids are above ETL  |  |  |  |  |  |  |
| Hissar         | 0                      | 0  | 0  | 0  | 0  | 0  | and white fly is also near ETL. Helicoverpa recorded in few fields (non Bt cotton) above ETL level in this week. No incidence of   |  |  |  |  |  |  |
| Fatehabad      | 0                      | 0  | 0  | 0  | 0  | 0  | disease. Weed infestation of Sanwa grass ( <i>Echinochloa sp.</i> ), Motha ( <i>Cyperus sp.</i> ), Dub grass ( <i>Cynodon sp.</i> ) and Santhi ( <i>Trianthema</i>   |  |  |  |  |  |  |
| RAJASTHAN      |                        |    |    |    |    |    | sp.) was noticed for which the recommended weedicides were sprayed.  |  |  |  |  |  |  |
| Hanumangarh    | 0                      | 0  | 0  | 0  | 0  | 0  |  |  |  |  |  |  |  |
| Sri Ganganagar | 0                      | 0  | 0  | 0  | 0  | 0  |  |  |  |  |  |  |  |
| Banswara       | 0                      | 0  | 0  | 0  | 0  | 0  |  |  |  |  |  |  |  |
| ORISSA         |                        |    |    |    |    |    | The crop is in boll development and maturity stage. Incidence of sucking pest, Spodoptera and bollworm was noticed but only leaf   |  |  |  |  |  |  |
| Koraput        | 0                      | 0  | 0  | 0  | 0  | 0  | hopper (jassid) populations were above economic threshold levels. Incidence of Bacterial leaf blight was noticed in some patches. To control sucking pest population, spray Buprofezin or Diafenthiuron. Wilt and leaf reddening problems may be managed with the      |  |  |  |  |  |  |
| Kalahandi      | 0                      | 0  | 0  | 0  | 0  | 0  | ecommendations described in the annexure. Application of DAP and micronutrients and this stage pf peak flowering and boll  |  |  |  |  |  |  |
| Balagir        | 0                      | 0  | 0  | 0  | 0  | 0  | formation stage will help the crop to retain bolls for higher yields. Conserve rain water by making cross bunds in between two rows of   |  |  |  |  |  |  |
| •              |                        |    |    |    |    |    | cotton.  |  |  |  |  |  |  |
| GUJARAT        |                        |    |    |    |    |    | The crop is at flowering, squaring and boll formation stage. Farmers are advised to take up control measures for leaf hopper and   |  |  |  |  |  |  |
| Amreli         | 0                      | 0  | 0  | 0  | 0  | 0  | whitefly if the populations cross ETL. PINK BOLLWORM: Infestation is expected to reach initial damaging levels by end of October   |  |  |  |  |  |  |
| Bhavnagar      | 0                      | 0  | 0  | 0  | 0  | 0  | and intensify in November-December. Farmers are advised to install pheromone traps @ 5-6 /ha to monitor pink boll worm. At   |  |  |  |  |  |  |
| Jamnagar       | 0                      | 0  | 0  | 0  | 0  | 0  | economic threshold levels of 8 moths per trap per night for three consecutive nights and/or 10% damaged bolls with grown-up larvae,  |  |  |  |  |  |  |
| Rajkot         | 0                      | 0  | 0  | 0  | 0  | 0  | spray Quinalphos or Thiodicarb once in October and pyrethroid preferably 'lambda-cyhalothrin' once in November. Thiodicarb is  |  |  |  |  |  |  |
| Baruch         | 0                      | 0  | 0  | 0  | 0  | 0  | sprayed more than once can cause leaf reddening in rainfed farms. If unattended, pink bollworm can cause heavy damage in October   |  |  |  |  |  |  |
| Sabarkantha    | 0                      | 0  | 0  | 0  | 0  | 0  | and November. Strictly avoid pyrethroids until the end of October. Never use any insecticide mixtures. This can result in whitefly   |  |  |  |  |  |  |
| Surendranagar  | 0                      | 0  | 0  | 0  | 0  | 0  | infestation. Farmers are advised to terminate cotton crop in December without extending it any further into 2016. This is necessary to reduce pink bollworm incidence and bollworm resistance to Bt-cotton. Cotton stalks of last year have been observed lying on the |  |  |  |  |  |  |
| Ahmedabad      | 4                      | 0  | 0  | 0  | 0  | 0  | bunds. They must be destroyed immediately. Old cotton seed stored in go-downs or homes serve as a carryover for pink bollworm  |  |  |  |  |  |  |
| Vadodara       | 3                      | 0  | 0  | 0  | 0  | 0  | moths. If the seeds are infested, these may be destroyed immediately.  |  |  |  |  |  |  |
| Patan          | 0                      | 0  | 0  | 0  | 0  | 0  | mounds in the seeds are intested, these may be destroyed infinediately.  |  |  |  |  |  |  |
| Mehsana        | 0                      | 0  | 0  | 0  | 0  | 0  |  |  |  |  |  |  |  |

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| MP          |    |    |    |   |    |   |   |  |  |  |  |  |  |  |
|-------------|----|----|----|---|----|---|---|--|--|--|--|--|--|--|
| Khargaon    | 0  | 0  | 0  | 0 | 0  | 0 | The crop condition is good. If sucking pests are observed to reach economic thresholds in any fields, 2.0% neem oil emulsion in soap  |  |  |  |  |  |  |  |
| Dhar        | 0  | 0  | 0  | 0 | 0  | 0 | may be sprayed. Strictly avoid excessive nitrogen and chemical insecticides.  |  |  |  |  |  |  |  |
| Khandwa     | 0  | 0  | 0  | 0 | 0  | 0 |   |  |  |  |  |  |  |  |
| MAHARASHTRA |    |    |    |   |    |   |   |  |  |  |  |  |  |  |
| Nagpur      | 0  | 0  | 0  | 0 | 0  | 0 | Pre monsoon cotton is in boll bursting stage, cotton sown in monsoon is in boll development stage and July sown cotton is in boll   |  |  |  |  |  |  |  |
| Wardha      | 0  | 0  | 0  | 0 | 0  | 0 | initiation stage. Square dropping was seen in all species of cotton. Square drying also noticed in Bt varieties. To avoid further dropping  |  |  |  |  |  |  |  |
| Chandrapur  | 0  | 0  | 0  | 0 | 0  | 0 | of squares, recommended dose of Planofix may be sprayed. Repeat spray after seven days. Jassids and White fly incidence was   |  |  |  |  |  |  |  |
| Yavatmal    | 0  | 0  | 0  | 0 | 0  | 0 | noticed in some parts of the state. Jalna (66.85%) and Akola (61.13%) districts showed continuous jassid infestation above ETL.   |  |  |  |  |  |  |  |
| Amravati    | 0  | 0  | 0  | 0 | 0  | 0 | Jassid affected villages in the range of 10-30% were Chandrapur (19.73%), Nanded (16.16%), Parbhani (15.31%), Nagpur (12.05%).  |  |  |  |  |  |  |  |
| Akola       | 0  | 0  | 0  | 0 | 0  | 0 | Whereas, <10% villages affected were Gadchiroli (9.09%), Aurangabad (6.83%), Yeotmal (3.88%) and Buldhana (0.85%). In Amravati  |  |  |  |  |  |  |  |
| Buldhana    | 0  | 0  | 0  | 0 | 0  | 0 | district, whitefly population crossed ETL in 28.16 % villages. Villages affected by leaf reddening were Dhule (88.54% villages)   |  |  |  |  |  |  |  |
| Parbhani    | 0  | 0  | 0  | 0 | 0  | 0 | followed by Parbhani (66.80% villages), Ahmednagar (43.78%), Nagpur (31.69%), Chandrapur (30.26%), Gadchiroli (18.18%) and  |  |  |  |  |  |  |  |
| Nanded      | 0  | 0  | 0  | 0 | 0  | 0 | Amravati(14.08%). Less than 10% villages affected by leaf reddening were Beed (9.86%), Yeotmal (7.76%), Akola (6.55%) and Washim (6.59%). American bollworm was above ETL level in <i>G.arboreum</i> and <i>G.hirsutum</i> sown in June and July cotton. <i>Bollworm</i>  |  |  |  |  |  |  |  |
| Beed        | 3  | 0  | 0  | 0 | 0  | 0 | management will be crucial in non Bt cotton. Recommended measures may be initiated. Wherever soil moisture is adequate,   |  |  |  |  |  |  |  |
| Washim      | 0  | 0  | 0  | 0 | 0  | 0 | nanagement will be crucial in non Bt cotton. Recommended measures may be initiated. Wherever soil moisture is adequate, application of DAP at this stage will help the plants in boll setting and retention for high yields. Otherwise, 2% urea or 2% DAP spray   |  |  |  |  |  |  |  |
| Dhule       | 0  | 0  | 0  | 0 | 0  | 0 | application of DAP at this stage will help the plants in boll setting and retention for high yields. Otherwise, 2% dreat of 2% DAP spray at flowering stage. 1% dreat and 1% Magnesium sulphate spray at boll development stage should be given.  |  |  |  |  |  |  |  |
| Jalgaon     | 0  | 0  | 0  | 0 | 0  | 0 | at nowering stage. 170 area and 170 magnesiam sulphate spray at boli development stage should be given.   |  |  |  |  |  |  |  |
| Jalna       | 0  | 0  | 0  | 0 | 0  | 0 |   |  |  |  |  |  |  |  |
| Aurangabad  | 0  | 0  | 0  | 0 | 0  | 0 |   |  |  |  |  |  |  |  |
| TELANGANA   |    |    |    |   |    |   | The crop is at reproductive stage. Second or third split application of N & K fertilizers to be given wherever necessary. Foliar  |  |  |  |  |  |  |  |
| Adilabad    | 0  | 0  | 0  | 0 | 0  | 0 | application of nutrients with 1-2% Urea or 1-2% KNO3 along with 1% MgSO4 to mitigate abiotic stress conditions as well as leaf  |  |  |  |  |  |  |  |
| Warangal    | 0  | 0  | 0  | 0 | 0  | 0 | reddening. Infestation of Jassids were 0.45 to 1.35 / 3 leaves, Whitefly 0.75 to 6.6 / 3 leaves, Thrips 0.40 to 1.6 / 3 leaves and Aphids 0.15 – 1.3 / 3 leaves were noticed. Management of rhizoctonia rot may be achieved by soil drenching with Copper-oxy-chloride @ 3.0  |  |  |  |  |  |  |  |
| Khammam     | 0  | 0  | 0  | 0 | 3  | 0 | g/l of water. For the control of fungal leaf spot diseases, spraying with Propiconazole @ 1.0 ml/l or Mancozeb + Carbendazim 2.0 g/l of   |  |  |  |  |  |  |  |
| Karimnagar  | 0  | 0  | 0  | 0 | 0  | 0 | water is recommended. Due to high temperatures and high relative humidity, sucking pests and Spodoptera was observed. For the control of leafhoppers, whitefly and <i>Spodoptera</i> , spraying of recommended measures as appended in the advisory may be followed:  |  |  |  |  |  |  |  |
| Nalgonda    | 0  | 0  | 0  | 0 | 0  | 0 |   |  |  |  |  |  |  |  |
| AP          |    |    |    |   |    |   | on a rainfree day. Do not spray pyrethroids.  |  |  |  |  |  |  |  |
| Guntur      | 0  | 0  | 0  | 0 | 0  | 3 |   |  |  |  |  |  |  |  |
| Prakasam    | 3  | 0  | 0  | 0 | 0  | 3 |   |  |  |  |  |  |  |  |
| KARNATAKA   | 3  | U  | 0  | 0 | 0  | 3 | During heavy rainfall conditions, it is suggested to drain out the stagnant water in cotton crop to avoid boll dropping and top dress the   |  |  |  |  |  |  |  |
| Dharwad     | 6  | 4  | 0  | 0 | 0  | 0 | crop with 25 kg Urea/acre. Nipping of growing shoot tip is advised in 100-110 days old crop especially in H x B hybrids and spray   |  |  |  |  |  |  |  |
| Haveri      | 6  | 10 | 0  | 0 | 0  | 0 | the crop with 1.0 % of 19:19:19 (10g/lit of water) water soluble fertilizer along with 1 % MgSO4 and Planofix to manage leaf  |  |  |  |  |  |  |  |
| Mysore      | 33 | 19 | 10 | 4 | 14 | 8 | reddening and square dropping effectively. Root rot is observed in patches in some areas, suggested for drenching of Vitavax Power @ 2 g/lit to the affected plant and the surrounding plants. It is suggested to initiate control measures with profenophos, vhlorpyriphos or quinalphos for effective management of the mirid bugs and midge. The crop at peak square and boll formation stage should not be irrigated heavily in deep black soils. |  |  |  |  |  |  |  |

| TAMILNADU   |    |     |    |    |   |    |
|-------------|----|-----|----|----|---|----|
| Perambalur  | 26 | 13  | 7  | 0  | 0 | 0  |
| Salem       | 20 | 29  | 4  | 0  | 0 | 4  |
| Trichy      | 39 | 110 | 48 | 10 | 0 | 14 |
| Virdhunagar | 39 | 110 | 48 | 10 | 6 | 18 |

The crop is in flowering stage. *Cynodon dactylon, Parthenium and Trianthema portulacastrum* were the major weeds infestation noticed. No incidence of pests or diseases was noticed

| Legend   |     |      |       |       |      |
|----------|-----|------|-------|-------|------|
| Rainfall | < 5 | 5-20 | 20-50 | 50-80 | > 80 |
| in mm    |     |      |       |       |      |