

Central Institute for Cotton Research

Fourth Weekly Advisory for Cotton Cultivation: 12 to 19 August 2012

"The advisory is based on inputs received from the State Agricultural Universities of the respective states"

NORTH INDIA

Punjab

As whitefly incidence continues to be high in Bhatinda and Faridkot, farmers are being advised to manage it with OPs (Ethion @800ml/acre; Triazophos @600ml/ac). The incidence of CLCuD was 86.5 % in susceptible RST 9 and widespread in Bt hybrids in farmers' fields. Check the vector whitefly to avoid spread. Weeds can be controlled with Paraquat at 500ml/acre or Glyphosate at 1L/acre in 100 L of water with protective hood to avoid drift on to cotton leaves. Spray Potassium nitrate 2% per acre and repeat 3-4 times at weekly intervals as the flowering has initiated.

Haryana

In general, the crop condition is good. However in certain fields water stress was observed due to weak monsoon in the month of July. Weeding and interculture must be carried out to conserve the moisture. Detopping is recommended in *desi* cotton. Survey of insect pests and diseases of cotton crop was made in Hisar, Fatehabad and Sirsa districts. Whitefly and leaf hopper infestation was much below ETL.. The activity of the mealy bug parasitoid, *Aenasius bambawalei*, as indicated by the presence of mummies, was recorded in all mealy bug infested cotton fields. Since *Aenasius* parasitoid is quite active, the mealy bug is likely to remain in low profile and there is no need of spraying insecticide against the pest. The present weather conditions are also favourable for build-up of red hairy caterpillar. Therefore, wherever this pest is a problem, particularly in the sandy areas, recommended insecticide may be sprayed for its control. In root rot disease patches, soil drenching with carbendazim solution @ 2 g/l water can further stop the spread of the disease. Leaf curl virus disease has been noticed only in Hansi sub division of Hisar district. Nimbecidene @ 5 ml/l of water may be sprayed for the vector management to avoid further infestation. Weeds of *Sida* and *Abutilon* spp. must be removed around the fields, water channels and road side to check the whitefly population on alternate host of the virus/vector. If heavy rain occurs, proper drainage is required. Farmers are advised to monitor their crop for insect pests and diseases regularly.

Rajasthan

In general the crop condition in Sriganganagar is good. However in certain fields, water stress was observed due to weak monsoon in the month of July. Weeding and interculture must be carried out to conserve the moisture. Detopping is recommended in *desi* cotton. Fields should be free of weeds including water channels and road side to check the whitefly population on alternate host of the virus/vector. If heavy rain occurs, proper drainage is required. Farmers are advised to monitor their crop for insect pests and diseases regularly. The weather condition during next 5days in Banswara would be stable with scanty to heavy rains. Farmers are advised to undertake interculture operations in maize & cotton with urea top dressing. Rice nursery may be transplanted in prepared field. Excess moisture in field may be drained out. Apply weedicides in standing soybean crop. Sucking pest – Imidacloprid 17.8 @ 150-200ml/ha or Dimethoate 30 EC @ 1 lit/ha.

CENTRAL INDIA

Gujarat

As per the latest reports available, nearly 21 lakh hectare area sown. The cloudy weather with sporadic rains however is insufficient for cotton.

Madhya Pradesh

Crop is in early vegetative stage. It is essential to apply the top dressing of fertilizer N (urea @ 20 kg/acre) to crops that are in early squaring stage. The last week was full of rains that permitted only two days for field operations. More than 800 mm rain till date was received in tehsil. Cultivators are advised to pay proper attention on drainage in water logged fields by providing adequate drainage by making small, shallow surface drains by opening a furrow for every few rows of cotton along the slope. Weeding, Inter culture & fertilizer application are advised as and when condition permits. Jassids has crossed the ETL but with continuous rains, acephate spray is recommended.

Maharashtra

Pre-seasonal irrigated cotton in Marathwada region is in flowering stage. If second top dressing of nitrogen is not applied, it should be applied @ 60 kg N/ha. Infestation of jassids and thrips is noticed in the region. Spray of Magnesium sulphate @ 0.2% should be undertaken during flowering and boll formation stage. Rainfed cotton is in square formation stage. First top dressing of nitrogen should be done @ 36 kg N/ha, one month after sowing. Spray of 2% urea / DAP and $MgSO_4$ should be undertaken during square formation stage. Acephate 75SP@1g/L may be sprayed against insect pests. Weeding and intercultural operations should be carried out for effective weed management.

The total rainfall received at Akola centre was 410mm. Incidence of Aphids was noticed in some fields, but the population was below ETL and likely to increase in next week. Aphids may be ignored with no chemical intervention. Due to continuous rains from last 15 days, farmer should take intercultural operation, top dressing urea application may be done immediately after weeding.

At Ahmednagar/Nandurbar, the crop is in early vegetative stage. The crop had suffered early season moisture stress. Rains during the last few days would improve the moisture in the rooting zone. Therefore, it is appropriate to apply fertilizers that were avoided due to a dry spell. Apply top-dressing of fertilizer N @ 20 kg urea per acre to crop that is in squaring stage. Anticipating heavy rains in the next few days, making ridges and furrows would alleviate excess soil moisture conditions.

In the Vidharba region, the crop has experienced excess soil moisture condition due to heavy rains in the past few days. Immediate attention is to inter-cultivate the fields as rains are not expected for a couple of days. Top-dressing is to be given priority wherever, the crop is in squaring stage (urea @ 20 kg/acre).

Odisha

Light to moderate intensity rainfall is expected during these five days period. Necessary arrangement should be made to drain out excess water from cotton field. Do not go for spraying in these rainy days. The cotton crop is at six to seven week stage. Hoeing and earthing up should be done to control weeds. Glyphosate may be sprayed using hood @ 1.0 kg/ha for controlling weeds between the rows. Second top dressing must be done with 25% N Planofix (NAA) hormone may be sprayed @ 2 ml/9 litres of water at 45 DAS to reduce square and flower drop. There is incidence of alternaria blight and Bacterial leaf spot in some place. Spray Mancozeb @ 2.5 g per one litre of water for Alternaria blight and for bacterial leaf spot spray Steptocycline @ 0.1g with copper oxychloride 2.5g per one litre

water. Spray 500 litre of these spray solution for one hectare area. For reducing the jassid and aphid population first spraying should be done with neem based pesticide @ 3 ml/litre of water. To control spodoptera, spray Chloropyriphos @ 2 ml/lit of water.

SOUTH INDIA

Andhra Pradesh

In the Telangana region, the crop is 50-60 days old. Depending upon the moisture availability, farmers are advised to take up second split application of fertilizers. For the control of sucking pest complex, stem application with monocrotophos + water (1:4) is advised. In the coastal region, the crop is seedling to 40 days stage. Taking the advantage of the rains received during the first week of August, farmers are advised to go for first split application of fertilizers. Wherever inter cultivation is not possible for the control of grassy weeds, spray 400 ml of quizalafop ethyl in 200 l of water per acre. For the control of broad leaves, spray 250 ml pyriethion sodium in 200 l of water per acre.

Karnataka

Sowing of desi cotton varieties (Jayadhar, DDHC-11 and RAHS-14) may be continued in northern districts. Heavy and continuous rainfall occurred in the districts of Mysore, Hasan, Chamarajnar and Davanagere during this week. Advised to drain out the excess water from the cotton fields as the crop is sensitive to water logging. Advised foliar spray of Planofix (5 ml in 15 lit of water) and 2% DAP for the crop which is at peak flowering and boll formation stage.

As cloudy conditions and continuous drizzling is forecast in southern districts where cotton crop is at flowering and boll formation stage, leaf spot and rotting of early formed lower bolls is expected. Advised to monitor the same and suggested to spray the crop with Mancozeb 75 WP + Chlorothalonil 70 WP @ 2 g/lit water. Advised to have close monitoring of mirid bug in the crop which is at peak square formation stage and advised to take up control measures with spraying of Acephate 75 SP @ 1 g/lit of water if the insect is noticed. In heavy rainfall areas where hand weeding and intercultivation is not possible, advised post emergent selective herbicide application of Quizalofop Ethyl 5 EC (Taraga Super) @ 1 ml commercial product in one lit of water (i.e. 0.05 a.i./ha) at 30 DAS and 60 DAS for the control of grassy weeds in standing crop of cotton.

In northern districts where the crop is under protective irrigation and the rainfall is scanty, suggested to irrigate the crop at critical stages *i.e.*, square formation and flowering by adopting alternatively alternate furrow irrigation to irrigate more area with the available water.

At Raichur, the cotton crop is around 15-20 days old. The sucking insects like leaf hopper, thrips, aphids and white fly population is below ETL and Ash weevil (*Myllocerous*) unusually found to be high, 2-3 Adults per plant. The dry spell is continued in the region.

Tamil Nadu

The cotton season has come to an end with final picking in fields. Windy weather is continued in winter irrigated and winter rainfed cotton sowing tracts of Tamil Nadu. Occasional drizzling is there in Coimbatore and Erode districts. Sowing has started under winter irrigated cotton in farmers fields.

Note: The advisory is based on inputs received from the State Agricultural Universities of the respective states and for queries or clarifications or details, the Project coordinator (cotton), Coimbatore may be contacted.

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