

Central Institute for Cotton Research

Third Weekly Advisory for Cotton Cultivation: 5 to 11 August 2012

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

NORTH INDIA

Punjab

The cotton crop is at square to boll development stage. In case of sucking pests, the infestation of white fly has been observed above ETH level. It is advised that if whitefly increases more than 6adults/leaf, then 600ml Trizophose 40EC or 800 ml Ethion 50 EC per acre may be sprayed. The infestation of jassid is still below ETH level. At Faridkot, whitefly incidence continues to be high and farmers being advised to manage it with OPs (Ethion @800ml/acre; Triazophos @600ml/ac). Jassids have increased in numbers with yellowing and downward curling of leaves. Farmers are advised to spray acephate75SP @1g/l. Apply irrigation as dry conditions persist. CLCuD was found in traces to 95 % with 0-IVth grade severity on different Bt hybrids. 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.

Haryana

The cotton crop is in peak square phase to flowering phase. In general the crop is healthy. 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. 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 economic threshold level. Mealy bug attack was only on some plants bordering roadside or water channels where the pest was seen surviving mainly on congress grass and *Kangi butti*. 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. In the next fortnight, the leaf hopper population on cotton may increase if rains occur frequently and mean relative humidity remains above 70 per cent. However, the whitefly population is likely to remain at low to moderate level. On the other hand, if there is a long dry spell of 15 days or more, the population of whitefly may increase rapidly. To control whitefly, Nimbecidence @ 1 litre/acre may be sprayed at weekly interval. 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. 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. Nimbecidence @ 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. Farmer's are advised to monitor their crop for insect pests and diseases regularly.

Rajasthan

The crop is in peak flowering and there is moisture stress as there is no rains. If the situation continue there is possibility of severe shedding of developing bolls. In desi cotton, attack of spotted boll worm is below ETL and to be monitored with pheromone traps. In American cotton, for attack of sucking insects like jassids, white fly and thrips, spray of systemic insecticides suggested. Neem oil+ Neem seed kernel extract at recommended dose on cotton may be sprayed for management of sucking pests. The weather condition during next 4 days would be stable with clouds.

Farmers are advised to have inter culture 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. For sucking pest control, spray – 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. Jassid and thrip infestations are also seen in the crop. Spray neem oil+ Neem seed kernel extract at recommended dose(Neem oil (1 lit) + Neem seed kernel powder (1 Kg) + Emulsifier (100 ml))

Madhya Pradesh

The last week was full of rains that did not permit any field operations. About 750 mm rain till date received. Cultivators are advised to pay proper attention on drainage in water logged fields. Weeding, Inter culture & fertilizer application are advised as and when condition permits. Jassids only crossing ETL & needs proper attention. Spray acephate at recommended dose if jassids are high. Do not spray imidacloprid or thiamethoxam.

Maharashtra

Pre-seasonal cotton is in square formation stage. Infestation of sucking pests viz. jassids and aphids is reported in various fields. Ignore aphids. Rainfed cotton is in vegetative growth phase. Where basal dose of fertilizer is not applied at the time of sowing or prior to it, apply @ 48:60:60 NPK kg/ha. immediately. In case, basal dose is previously applied, top dressing of nitrogen should be done with 36 kg Nitrogen / ha. Weed management practices should be undertaken. Intercultural operations should be followed. In case, incidence of bacterial blight is noticed, spray of Copper oxychloride @ 25 g + Streptocycline 1g per 10 liters of water should be undertaken. Rainfall at Akola Centre 394.2mm was received up to 2nd August 2012. Stunted growths of Bt Cotton plants in pre monsoon grown cotton were not recovered. Excess rains should be drained out from field. Intercultural operation should be taken in rain free period. If Sucking pest (Jassids, Aphids & Thrips) observed, spray Dimethoate 30EC 10 ml or Acetamipride 20 WP 1.5g Methyl Demeton @ 8 ml in 10Ltr of water

SOUTH INDIA

Andhra Pradesh

Normal rainfall is received in the major cotton growing districts of Kurnool, Medak, Warangal, Khammam & Prakasam, excess in Krishna, Guntur & Ranga Reddy District, and Deficit in Mahaboobnagar, Nalgonda, Karimnagar and Adilabad Districts as on 25/07/2012. The cotton crop is sown in an area of 18.14 lakh / ha till end of July, In general, the crop growth and condition is satisfactory. The crop is in vegetative stage and the first or second top dressing of N & K advised depending upon the age of the crop. Post emergence herbicide applications of Quizalofop ethyl and Pyriithiobac sodium is recommended wherever inter cultivation is not possible due to continuous over moisture. Incidence of Leaf Hoppers observed in most of the cotton growing areas. For the control of early season sucking pests, stem application of Monocrotophos @ 1:4 ratio at 30 & 45 DAS is recommended. Root Rot incidence is noticed in some of the cotton growing fields. Soil drenching of copper oxy chloride for the control of root rot is advised.

Karnataka

Advised top dressing of cotton crop with 25 kg N/ha (i.e. 50 kg Urea/ha) with spot application and earthing up of crop with intercultivation. Manage sucking pests with neem oil and neem seed kernel extract Spray Neem oil + Neem seed kernel extract (Neem oil (1 lit) + Neem seed kernel powder (1 Kg) + Emulsifier (100 ml)

Shoot weevil damage is observed in almost all cotton growing districts where the crop is at vegetative stage (30-45 days old). Advised spraying of Profenophos 50 EC @ 2 ml/lit + Dichlorovos 100 EC @ 2.0 ml/lit of water. Under unavoidable conditions it is suggested to hand pick the weevil during morning hours and to destroy.

Advised for 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 southern districts of the state the crop under protective irrigation which is at square and early boll formation stage crop to be monitored for square dropping. Suggested foliar spray of planofix (5 ml in 15 lit of water) and 2% KNO₃. In mirid bug prone areas of southern districts it is suggested to have close monitoring of the insect in the crop which is at square formation stage and advised to take up control measures with spraying of Acephate 75 SP @ 1 g/lit of water. Sowing of desi cotton varieties (Jayadhar, DDHC-11 and RAHS-14) can be continued either as sole crop or as an intercrop in onion or chilli.

Tamil Nadu

In the summer irrigated zones of Tamil Nadu (Parts of Tirunelveli, Virudhunagar, Ramanathapuram, Madurai districts) picking of kapas is in progress. Wherever the summer cotton crop is completed, it is advised to uproot the cotton plant from the field to reduce the stem weevil population. Dry windy weather is prevailing in winter irrigated as well as in winter rainfed tract of Tamil Nadu. Preparatory work for winter rainfed sowing is in progress.

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 and wait for rain to stop. The cotton crop is at five to six week stage. Hoeing and earthing up should be done for controlling weeds. Quizalofop-p-ethyl may be sprayed @ 50g/ha for controlling monocot weeds. Second top dressing must be done with 25% N. 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 Spray Neem oil + Neem seed kernel extract (Neem oil (1 lit) + Neem seed kernel powder (1 Kg) + Emulsifier (100 ml) . To control root rot disease spray Ridomil if phytophthora/ Pythium. For Rhizoctonia rot carbendazim drench @2g/lit. To control Spodoptera, please hand pick egg masses in the field

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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