

July-August, 2020

CCRI NEWS

Central Cotton Research Institute Multan.



Pakistan Central Cotton Committee Ministry of National Food Security & Research
Old Shuja Abad Road, Multan, Pakistan.

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Cotton Crop Management Group Meeting

The 1st meeting of the Cotton Crop Management Group for the crop season 2020 was held at CCRI Multan under the chairmanship of Mr. Nauman Ahmad Langrial, Minister for Agriculture Punjab. Agriculture officials, representative from pesticide and seed companies, farmers association attended the meeting. Cotton crop condition, insect pests and disease situation, irrigation water availability and other matters related to provision of subsidy on fertilizers, farmers training programs, locust control strategy were discussed in detail. Representatives from Irrigation Department anticipated sufficient water availability in canals during month of July for the cotton crop. Representatives of Pesticide companies also assured required quantity of cotton-pest specific pesticide during the season.

Farmers organization complained about the low quality pesticides and their mixing, seed quality and germination problems hampering cotton productivity.

Dr. Khalid Abdullah, Cotton Commissioner, Ministry of National Food Security & Research stated that efforts may also be made for fast track approval of indigenous advanced seed technology. Agriculture Minister Punjab assured the farmer members for redressal of issues pertaining to cotton production and marketing, pesticide quality, prices and availability for enhancing the cotton production.



Farmers Advisory Committee Meeting

The 6th meeting of the Farmers Advisory Committee (FAC) of the Institute met on 17th July 2020 and issued set of guidelines for cotton farmers for the next two weeks till 31st July. The meeting was chaired by Dr. Zahid Mahmood, Director CCRI Multan and attended by Heads of various departments. The recommendations of the FAC are as under:



- Farmers should avoid irrigation in case of rain, or if unavoidable, can apply light irrigation in the evening.
- Farmers whose crops have attained three feet height or more should avoid hoeing by tractor.
- In case of fruit shedding, farmers should apply 200 grams boric acid, 250 gm zinc sulphate, 200 gm potassium nitrate, 400 gm magnesium sulphate, and two kilogram urea. These chemicals should be mixed in water separately and applied at the rate of 100 litres of water per acre. Crop showing yellow color indicates deficiency of nitrogen which can be overcome by applying nitrogen with water.
- In case of crop showing more vegetative growth than fruit then farmers should apply growth retardant spray or stop apply fertilizers and increase duration of water application.
- The economic threshold level (ETL) for Aphid is one aphid per leaf which can be tackled through application of 100 ml Dytteferon or 60 gm Flunicamide, or 50 gm Nitin Pyram in 100 litres of water per acre.
- For Whitefly management, farmers should install 8-10 yellow sticky traps per acre.
- In case of five Whiteflies (adult and pupae) per leaf, farmers should apply 400 ml Pyrepyrexifen or 125 ml Spirotetramate plus 250 ml Biopower, or 200 gm Thiocycline hydrogen oxalate and acetamidrid in 100 litres of water per acre.
- In case of incidence of 10 Thrips per leaf, farmers should apply 125 ml chlorfenapyr or 50 ml spinetoram chlorpyrifos in 100 litres of water per acre.
- In case of Pink bollworm attack on fruit bearing crop, farmers should spray 100 ml Spinetoram in 100 litres of water per acre.
- Farmers should also install a pheromone trap for five acre flower bearing crop area to monitor Pink bollworm. 6-8 pheromone traps be installed per acre for management of Pink bollworm.
- Mites attack should invite application of 480 ml Fipronil or 1000 ml chlorpyrifos per acre through water application.
- Farmers who have sown cotton early for purpose of obtaining seed, should remove plants of other varieties to ensure purity. Phutti or seed cotton or flower plucked should be healthy, completely opened and not affected by pests. Phutti or seed cotton should be dried under sunlight and undergo ginning process early. Then the seed so obtained should be dried under the sunlight to make it ready for next season sowing.

Meeting on “Factors of Low Seed Germination & Measures for Improvement”

A meeting regarding “Factors of low germination of cotton seed and devising strategy for availability of quality seed” was held at Cotton Research Station Multan on 17.07.2020. The meeting was chaired by Dr. Abid Mahmood, Director General Agriculture (Research) AARI Punjab. The house was informed that cottonseed was badly damaged by unprecedented frequent rains in September 2019, which severely affected cotton crop and quality of seed. Unexpected high temperature coupled with high humidity during boll development period affected embryo development resulting in poor seed health and vigor. Moreover, pest attack especially Pink bollworm and high pressure of sucking insect pests (Whitefly and Dusky Cotton Bug) damaged the seed.

The Committee, thus proposed various measures for improving seed quality and germination. The Committee stated that Early Generation System should be adopted for maintaining the genetic and phenotypic purity of cultivar along with strengthening of Seed Certification System. Picking should be after 60% boll opening and 2-3 pickings be done instead of 1 picking. Middle portion of the plant should be selected for seed procurement if only 1 picking is opted. Minimum trash, early ginning, proper seed storage at 8-10% moisture. For seed purpose, crop should be sown during 15-April to 15 May. Ginning process needs to be improved to avoid seed damage. Dusky cotton bug and Pink bollworm should be properly controlled. Whitefly causes stress on plant and seed development. In case of high temperature and humidity, light irrigation should be recommended. Boron application have good impact on seed germination (2 kg/hectare through fertigation).

Dr. Zahid Mahmood, Director and Mr. Sajid Mahmood, Head, Technology Transfer, CCRI Multan attended the meeting.



Cotton Crop Surveys

Teams of scientific and field staff was constituted to survey the insect pests/disease and current crop situation during the current season in various cotton-growing areas. The team comprises Mr. Junaid Khan Daha Entomologist, Dr. Khadim Hussain, Dr. Dayim Shehzad, Hafiz Muhammad Imran, Dr. Khizer Hayat, Plant Breeder, Dr. Muhammad Ahmad & Mr Muhammad Tariq, Agronomist; Mr. Sajid Mahmood, Technology Transfer & Mr. Muhammad Tahir, Field Assistants. The team visited areas of Multan, Muzafargarh, PSC farm Perowal, Vehari, Mailsi, Duniapur, Shorkot, Toba Tek Singh, Rajana, Kamalia, Chichawatni, , Mian Channu, Kachha Khu, Lodhran & Bahawalpur, DG Khan and Rajanpur areas.

The overall cotton crop situation was observed satisfactory with excellent fruit bearing. Whitefly and Thrips was observed on early sown crop, while Jassid and Whitefly was observed on late sown crop. Larvae of Pink bollworm was also seen in flowers of early sown cotton in some fields. The surveying scientists recommended the suitable insecticides to farmers according to pest scenario.

Shuja Abad



Kabirwala



Multan, Muzafargarh, Perowal, Shorkot



Vehari, Mailsi, Dunyapur, Mian Channu, Lodhran



Toba Tek Singh, Rajana, Kamalia, Chichawatni



Bahawalpur, DG Khan and Rajanpur



Training on Pest Scouting & Insect Pests Identification

Dr. Rabia Saeed, Head, Entomology Section imparted training on "Pest Scouting and insect Pests Identification" to the technical and field staff of the Institute.



Visit of DG Agri Ext Punjab

Dr. Muhammad Anjum Ali, Director General Agriculture (Extension & A.R) Punjab along with Dr. Muhammad Aslam, Director Pest Warning (Cotton Zone), Multan; Mian Manzoor Ahmad, Deputy Director Agri (Ext) Multan visited CCRI Multan on August 10, 2020 in connection with reviewing status of current cotton crop and insect pests position. Moreover, modalities for provision of pheromone trap to the farmers under the PBW Project were also discussed.



Completion of Internship

Hafiz Muhammad Hasnain Shafi and Mr. Muhammad Aashir students of BSc (Hons) Agriculture Entomology from Institute of Plant Protection, Department of Entomology, MNS University of Agriculture Multan receiving Certificates after completion of internship at CCRI Multan from 25-02-2020 to 30-05-2020. Dr. Zahid Mahmood, Director CCRI Multan awarding certificates. Dr. Rabia Saeed, Head Entomology; Ms Shabana Wazir, Supervisor/SO Entomology along with the students.



Other Activities

Independence Day Celebrations



Kids Show

Tree Plantation



Installation of Yellow Sticky Traps

Installation of Pheromone Traps



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