

PROCEEDINGS OF THE SESSION ON PUBLIC - PRIVATE INTERACTION MEET REGARDING EVALUATION OF BT-COTTON FOR CLCuD TOLERANCE

As per the directives of the Hon'ble Deputy Director General (Crop Sciences), ICAR, New Delhi, a session on Public Private Interaction was held for during the Annual Workshop of the All India Coordinated Cotton Improvement meet on 8.4.2015 at Tamil Nadu Agricultural University, Coimbatore. It was chaired by Dr.C.D.Mayee, Former Chairman, ASRB, New Delhi with the following panel of Expert Members.

Expert panel members

Chairman: Dr.C.D. Mayee, Former Chairman, ASRB, New Delhi.

Co-Chairman: Dr.N. Gopalakrishnan, ADG (Crop Science), ICAR, New Delhi.
Dr R. Murugesan, Director, ABD, TNAU, Coimbatore

Members: Dr.S. Siwach, Director of Research, CCSHAU, Hisar,
Dr.K.R. Kranti, Director, CICR, Nagpur.
Dr.R. Ramasamy, MD, Rasi seeds.

The chairman initiated discussion on the “Multi-location evaluation for cotton leaf curl virus (CLCuD)” trials conducted under the aegis of AICCIP. The discussion was focused on aspects related to the methodology, results obtained and the way forward disease incidence. Representatives from the National Seed Association of India presented their view points. They were discussed elaborately in the presence of nearly 200 cotton scientists from ICAR and SAUs and about 35 representatives of the seed companies.

Issues raised by the Seed Industries were:

1. Reaction of entries varies with geographical location and also year by year.
2. Tolerant entries with less yield potential may not be preferred by farmers.
3. The result of CLCuD reaction of Bt cotton hybrids, was displayed on the web-site in the first week of March, but the seed production of those released entries

was already completed, packed and ready for distribution. Hence those seeds may be permitted for one year.

4. Retesting of all the entries found susceptible may be conducted for one more year before rejection.
5. As availability of resistant source is very limited, it will take another 4-5 years to identify resistant source.
6. The hybrids rated as susceptible now, was moderately resistant at company trials. Hence it needs to be tested for two years.
7. Incidence of whitefly was so high during the testing period, so controlling whitefly is more important.
8. Stability of resistant entries needs to be checked.

Scientists' remarks:

Dr C.D. Mayee explained that CLCuV is a complex disease, and needs proper management strategies. Susceptible entries, would serve as source for inoculums, thereby resulting in further spread of the disease. Therefore it is important to have a stringent evaluation system to prevent the approval and cultivation of any susceptible hybrids in north zone.

Dr. Kranti, Director, CICR, Nagpur said that the CLCuD evaluation protocols developed now were reasonably robust and that at least 4-5 entries showed high level of tolerance to CLCuD even under late sown conditions. The criteria for ranking the test entries into tolerant, moderately tolerant and susceptible, need to be revised to make it more stringent so as to approve only highly tolerant varieties/hybrids based on the late sown trials.

Dr N. Gopalakrishnan, Asst. Director General, Commercial Crops, ICAR, New Delhi advised that discipline and social responsibility should be displayed by Private Sector for disease free cultivation.

The points emanated from the discussion are

1. In addition to the existing categories of Tolerant, Moderately susceptible and susceptible, a new category of 'Slightly Tolerant' will be introduced for entries with more than 30% PDI but less than 40% PDI at 1st and 2nd observation respectively.
2. The Director, CICR, Nagpur will revisit the 2014-15 data and come up with the modified list as per the new rating to be immediately uploaded on the Website
3. The susceptible entries will be discarded from the seed chain.
4. The moderately tolerant and slightly tolerant will be tested for one more year for confirmation. Till that period the hybrids can be permitted for cultivation during 2015-16.
5. The tolerant Bt cotton hybrids may be permitted for cultivation for two years and later re-tested for tolerance under AICRP on cotton.
6. Common monitoring team will comprise of a Chairman, two members from CICR, two members from SAUs, two members from the private sector, one each from State departments of Punjab, Harayana and Rajasthan entrusted with the field evaluation at all the five locations.
7. For the trials to be conducted in 2015, the final data and recommendations will be displayed on the web-site on 15th November 2015.
8. Entries under moderately tolerant and slightly tolerant of 2014-15 trial will be allowed for retesting, simultaneously up to 100 new entries only will also be considered for evaluation @ two entry for each company.
9. To strengthen the CLCuD research, the NSAI may consider funding for establishment of in-house facility at CICR, RS, Sirsa.
10. During the year 2015, the CLCuD trials will be conducted based on the following guidelines:
 - a. Two trials will be conducted ie.,
 1. Pre-released Bt cotton hybrid trial
 2. Released (GEAC identified) Bt cotton hybrid trial
 - b. Maximum of three hybrids under pre-released and released Bt cotton hybrids may be sponsored per R & D company for mandatory testing at all the five test locations. No entries will be entertained for less than five locations in North zone.
 - c. Testing fee of Rs 20,000/- per entry per location will be charged for up to **three entries** and Rs 40,000 per entry per location for the next **two entries** per seed company. The testing fee plus service tax 12.36% as applicable would be payable along with the by 5th May, 2015 at CICR (RS), Sirsa