



## Influence of Wind in Growth and Development of Cotton

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Wind can stress the cotton plant, sufficient enough to reduce yield, although some wind may be beneficial in very hot humid conditions. Stronger wind regimes increase the crop water use and hence irrigation requirements. In wind prone areas, to protect young seedling from south west wind, the practice of making ridges and furrow in east to west direction and sowing is taken in northern side of ridges for August sown cotton in Tamil Nadu; In summer, sowing is taken in southern side of the ridges to protect south blowing wind. High velocity winds during boll development stage causes mechanical damages to the crop. The dry wind in the months of June and July with a wind speed of 15Km/h and above, blows through the



Shenkotta and Aaralwaimoli gaps in the Western Ghats causes mechanical damage to the cotton crop planted in Nanguneri and sankarankovil talk of Tamil Nadu. In Coimbatore district, ELS cotton is raised in east to west direction to avoid mechanical damage caused by east blowing high velocity wind (10-15 Km/h) from Palakadu gaps. The east to west direction planting facilitates pesticide/fungicide application and the reverse direction (North to South) cause more drift of pesticide/fungicides to soil. The observation noted that the sowing is taken an east to west direction in many fields along the slope. East blowing high velocity wind restrict sowing of North to South direction and also with across the slope of field. Wind modifies the temperature and humidity gradients around the cotton plant which in turn changes the evaporative demand. On the other hand, most wind damages to cotton plants occur during the first 3 to 6 weeks after emergence when the wind picks up soil particles and damages the young seedlings during impact. Wind storm commonly cause seedling mortality in North Zone. In the maturity phase cotton cannot be left for full bursting, there will be loss caused by removal of kapas by wind with high velocity. Further the spread of weed seeds, pest and disease from one field to others also influenced by the wind regime. Humid conditions after rain and speedy wind favour the spread and severity of boll rot.

## Quinquennial Review Team (QRT) visit to ICAR-CICR, Regional Station, Sirsa

The Quinquennial Review Team (QRT) comprising of Dr S. A. Nimbalkar (Chairman), Dr T.V.K. Singh, Dr B. M. Khadi, Dr M A Shankar and Dr K. V. Bhatt reviewed the activities of North zone AICRP on cotton and ICAR- CICR Regional Station Sirsa on 6-7 September 2018. At ICAR-CICR Regional Station Sirsa, Dr D. Monga, Head of the Station welcomed the team and presented a progress and activity report of the centre for the last five years (2012-17).The team appreciated the work done



especially development of varieties and hybrids of arboreum and hirsutum cotton, resistance monitoring in insects against insecticides and cry toxins, efforts for the management whitefly and cotton leaf curl virus disease in cotton by the station. The Chairman advised to impart greater emphasis on biological control research, including entomopathogens work being carried out against whitefly management. Dr B. M. Khadi suggested the breeders to strengthen basic and strategic research. Dr K V Bhatt stressed to conduct studies on marker assisted selection for CLCuD. On 7th Sept, 2018 the team visited the demonstration plots of the technologies developed by the station and experimental area of ICAR- CICR Regional Station Sirsa to see the progress of trials conducted by all the scientists of the station.



### Meetings/trainings attended/ lecture delivered

Dr Rishi Kumar, Principal Scientist (Ento), ICAR-CICR, Regional Station, Sirsa attended a block level camp on “Promotion of Agriculture mechanization for In-Situ management of crop residue in the state of Punjab, Haryana, Uttar Pradesh and NCT of Delhi” on 13.08.2018 at Block BhattuKalan of Fatehabad. The camp was organized by State Department of Agriculture and attended by Deputy Director Agriculture, Fatehabad, Sub Divisional Agriculture Officers Fatehabad blocks, Subject matter specialists of the Department of Agriculture, Assistant Plant Protection Officer, ATMs, BTM of ATMA (Agriculture Technology Management Agency) and 750 progressive farmers of the block. Dr Rishi delivered a lecture on the management of cotton pests and need of conservation agriculture.



Dr Satish Kumar Sain, Senior Scientist (PI Pathology), ICAR-CICR, Regional Station, Sirsa attended a block level camp on “Promotion of Agriculture mechanization for In-Situ management of crop residue in the state of Punjab, Haryana, Uttar Pradesh and NCT of Delhi” on 13.08.2018 at Block Sirsa in the grain market of Sirsa. The camp was organized by State Department of Agriculture and attended by Sub Divisional Magistrate, Deputy Director Agri, Sirsa, Sub Divisional Agriculture Officers Sirsa blocks, Subject matter specialists of the Department of Agriculture, Assistant Plant Protection Officer, ATMs, BTM of ATMA (Agriculture Technology Management Agency) and 600 progressive farmers of the block. Dr Sain delivered a lecture on the management of cotton pests and diseases.

- Dr Rishi Kumar, Principal scientist Entomology, ICAR-CICR, Regional Station, Sirsa attended 6th Annual Review Workshop of National Innovations in Climate Resilient Agriculture (NICRA) on August 7-8, 2018 NASC, New Delhi. He presented the progress report of NICRA project on Development of IPM strategies to combat whitefly menace in cotton in context of climate change for 2017-18.
- Dr V S Nagrare Principal scientist Entomology, ICAR-CICR conducted Survey on 31st July to 1st August 2018 in Buldana, Jalgaon and Dhule
- Dr V S Nagrare Principal scientist Entomology, ICAR-CICR delivered talk on 'Pink bollworm management' before 200 framers and Agri Department officials from Butibori block on 3rd August 2018



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