



PRESS RELEASE

BT COTTON INEFFECTIVE AGAINST INCREASING PINK BOLLWORM

Pink bollworm is emerging as a major pest in the cotton belt, specially in Andhra Pradesh and Gujarat according to field observations so far. The toxin in Bt cotton is proving to be ineffective against pink bollworm and does not kill it, it kills only the green bollworm said Dr. Suman Sahai, Director of Gene Campaign on her return from consultations in Hyderabad. This consultation was held with scientists, farmers, NGOs, representatives of the seed industry and cotton traders, to take stock of the current scenario with respect to Bt cotton.

There was a growing concern expressed about the future of Bt cotton varieties in the situation developing with pink bollworm. Scientists confirmed that the incidence of pink bollworm was on the rise and the pest attack was getting stronger every year. Substantial savings in pesticide use could not be expected in such a situation despite the Bt toxin in Bt cotton since farmers would have to continue to spray to control pink bollworm.

Probably the most important reason for the increase in pink bollworm populations is the spread of the illegal Navbharat 151 variety over the last few years. Because of the constant exposure to Bt toxin without any implementation of refuges, the green bollworm is under pressure, creating a favourable space for the pink bollworm to multiply. Farmers and breeders have created their own Bt cotton varieties by crossing the Navbharat 151 with locally adapted cotton varieties. These varieties have spread to many states through an informal sales network. Cultivation of a variety of illegal Bt cotton is now widespread.

The Gene Campaign field study on Bt cotton had found that the Monsanto Bt cotton was indeed vulnerable to pink bollworm and the farmers had been spraying heavily after 60 to 70 days to try to control the pest. Dr. Sahai said that scientific literature reports that field populations of pink bollworm harbour three genetic mutations that confer resistance to Bt toxin, so bollworm with any of the two mutant genes are resistant. Resistant bollworm moths mate with each other rather than with susceptible individuals so the offspring are fully resistant to Bt toxin. It is therefore clear that Bt resistance would persist and spread in the pink bollworm population. This is posing a serious challenge to the cotton scientists and their strategy of Bt pest management.

Dr. Suman Sahai