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Nagpur institute throws up challenge to Monsanto spinoffs, to hit fields in two years

Homespun Bt here at last

VIVEK DESHPANDE
NAGPUR, SEPTEMBER 29

AFTER facing criticism for years of failure in developing its own Bt cotton, the Central Institute for Cotton Research (CICR) now has something concrete to claim. It has been able to introduce the Cry1 Ac gene in an Indian cotton variety and, if all goes well, the institute's Bt will hit the market in another two years.

Director B M Khadi is confident the breed will be a success. "The CICR Bt will be an independent variety, which the farmers won't have to buy every year from the market like the Bt hybrids available currently.

"Moreover, it will be much, much cheaper than those now available," he said.

CICR has been trying to develop India's own Bt since the early 1990s.

"At long last, we have standardised our own protocol (method) for a primary transgenic variety. We call it meristem culture. Using this method, we have put the Cry1 Ac Bt gene in the famous Rajasthan variety, Bikaner Narma, and are currently testing it under different environmental conditions across the country. The results are very encouraging and there is little doubt that we'll be able to introduce our Bt in the market in two years," Khadi, who lad the research team at the University of Agricultural Sciences, Dharwad, said.

BET ON BT
- CICR Bt will be much cheaper than hybrid varieties currently available
- Farmers can preserve seeds for use in next season
- Field trials on under varied environmental conditions

SHEKHAR SONI

Incidentally, primary tran... is the original variety of the... like the one developed anc... keted by Monsanto. Seco... transgenic varieties (hyb... were developed under li... from Monsanto by compani... Mahyco, Rasi, Ankur and ... weedu. While hybrid seeds... to be bought anew every yea... primary variety can be pres... and used by the farmer in su... sive years.

CICR scientists have also ... duced the gene in three othe... eties—LRA 1566, LRK 51... RG 8 (Desi cotton)—and tl... tial trials are underway o... CICR campus. But their ef... is yet to be established, unli...

...genic ... seed, ... mar- ...ndary ...rids), ...cence ...es like ... Nuze- ... have ...ır, the ...erved ...acces- ... intro- ...r vari- ...6 and ...ie ini- ...n the ...ficacy ...ce the

Bikaner Narma modificatio...

"We were always interested ... the primary transgenic variet... Initially, we tried to use Mon... santo's somatic embryogenes... method on Indian varieties, bu... we failed. Cotton is acknowledge... to be a very tough crop from th... bio-technological point of view... Even the Monsanto method wa... successful on only two America... varieties, Coker 312 and Coke... 310. Similar efforts have failed i... China too," Khadi said.

According to the CICR direc... tor, besides his own institute, only... China has succeeded in develop... ing its own protocol, Pollen ... Pathway. "After an open field trial... at the CICR, the Bikaner Narma is... currently under trial at nine select... stations in south and central In... dia. One year later, we will subject... it to multi-locational trials (on se... lect plots) and large-scale trials... (on farmer's fields)," Khadi said.

"We hope the final results will... be good and our Bt will be ready... to hit the fields in two years," ... he added.