

Government nod for field trial of 20 new local GM cotton varieties

Home-grown varieties likely to be available at cheap rates

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NEW DELHI: As many as 20 desi Bt-cotton varieties developed in government-funded research institutions are set to undergo multi-location trials in the coming months.

The move will make some of the varieties available to the farmers as low-cost Bt cotton seeds.

On April 4, the Union Agriculture Ministry approved the field trials of these indigenous genetically-modified cotton varieties in 15 locations during the khariff 2016 season to identify the best varieties suited for each of the cotton-growing zones, sources said.

Almost 14 years after commercial cultivation of GM cotton was permitted in India, there is not a single Bt cotton

Details of move

- Move will make some of the varieties available to the farmers as low-cost Bt cotton seeds
- The Union Agriculture Ministry approved the field trials in 15 locations during the khariff 2016 season
- The field trials was conducted to identify the best varieties suited for each of the cotton-growing zones
- The new varieties have been developed by four institutions led by Central Institute of Cotton Research, Nagpur, which alone has readied 16 varieties

from the public sector in the market, compelling the farmers to buy expensive seeds from private seed companies.

With substantially lower seed production cost, the home-grown varieties, once approved, are likely to be

available at a cheap rate. Out of 1,128 Bt cotton hybrids approved for sale by the regulatory agency, Genetic Engineering Approval Committee, as many as 986 hybrids are based on the Monsanto technology, illustrating the domination enjoyed by the US firm in the Indian market.

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The remaining four vari-

eties are from three institutes: Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra; Punjab Agriculture University, Ludhiana and Orissa University of Agriculture and Technology, Bhubaneswar.

“Majority of the varieties are of short duration and compact. They will be tested in high density. The varieties will need less than half the fertilizers and insecticides required of the long-duration commercial Bt-cotton hybrids,” CICR director K R Kranthi told *DH*.

The new breed of desi GM cotton belongs to a class known as “variety” unlike the Bt cotton “hybrids” that are currently available in the market. The principal difference is while “variety” is a naturally occurring variation of individual plants within a species, which has been genetically engineered, hybrids are crosses between two species or distinct parent lines.

Production cost

The seed production cost of varieties is as low as Rs 20 per

kg, whereas hybrid seed production costs about Rs 800 per kg.

Seeds from a variety can be used in the next season, while hybrid seeds have to be purchased every year. “The Bt varieties have the advantage of the Cry1Ac gene being expressed in all seeds of the boll, unlike the Bt-hybrids, wherein at least 25% of the seeds in boll did not contain the gene,” said Kranthi.

As a result desi varieties are far more potent at fighting pests.

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