

Bollgard-3

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Bollgard-3 Latest News

Recently, there has been an increasing demand for Bollgard-3 in Punjab, ahead of the cotton sowing season.

About Bollgard-3

- It is a new pest-resistant **genetically-modified (GM) cotton variety**.
- It was **developed by Monsanto** more than a decade ago, and shows remarkable resistance to pests.
- It contains three **Bt proteins Cry1Ac, Cry2Ab and Vip3A** that cause insect death by disrupting their normal gut function. This in turn allows for the growth of a healthier cotton crop, and increases yield.
- Farmers are demanding the introduction of Bollgard-3, which is particularly **effective against lepidopteran pests like pink bollworm**.
- **Bollgard-1** was a Monsanto-developed Bt cotton introduced in India in 2002, followed by **Bollgard-2** in 2006. The latter remains prevalent today.
- And although these do have some pest-repellent properties, they are not effective against the whitefly and the pink bollworm, which arrived in Punjab in 2015-16 and 2018-19 respectively.

What is Bacillus Thuringiensis?

- **Bacillus thuringiensis (Bt)** is a soil-dwelling bacterium with potent insecticidal properties.
- In the past few decades, researchers have successfully inserted certain genes from Bt in various crops, like cotton, providing these with insect-repellent properties.

Bollgard-3 FAQs

Q1: What is the Bollgard 3 gene?

Ans: Bollgard III is a genetically modified (GM) cotton event primarily expressing three *Bacillus thuringiensis* genes encoding the in planta insecticidal proteins Cry1Ac, Cry2Ab and Vip3A.

Q2: What is Bt technology?

Ans: Bt technology uses genes from the soil bacterium *Bacillus thuringiensis* (Bt) to create plants that are resistant to certain pests.

Q3: What is Bollgard 1 and Bollgard 2?

Ans: Bollgard I and Bollgard II are brand names of genetically modified cotton varieties that produce a protein to protect against bollworms.

Source: [IE](#)

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