



## Notification and germplasm registration

### Bt cotton

#### Variety ICAR-CICR 18 Bt (CICR-H Bt Cotton 65)

Extensive cultivation of long duration Bt hybrids in rainfed regions has resulted in relatively low productivity. To achieve gains in cotton production, a Bt cotton variety, ICAR-CICR 18 Bt (CICR- H Bt Cotton 65) was developed at ICAR-CICR, Nagpur. This variety was developed from 29I x Bikaneri Narma Bt (Mon 531) through pedigree method of breeding where the presence of Bt gene across the generations was monitored through Cry1Ac - ELISA. The homozygosity of Bt gene (cry1Ac) was confirmed through zygosity PCR. The Bt cotton variety ICAR-CICR 18 Bt was identified in 88th meeting of Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops held on 31st July 2023 under the Chairmanship of DDG Crop Sciences, based on its exceptional performance in ICAR-AICRP on Cotton Trials for 3 years (2020-21, 2021-22 and 2022-23). The variety was approved for commercial cultivation under rainfed conditions of central zone comprising the states of Maharashtra, Madhya Pradesh and Gujarat through a gazette notification vide S.O. 4388(E) dated 8th October, 2024 (S. No. 259). The Bt variety ICAR-CICR 18 Bt has yielded an average of 15.47 quintals per hectare of seed cotton across 15 locations evaluated over 3 years. The entry has provided a potential yield of 22.98 quintal per hectare at Nagpur during AET2 (2022-23) under normal spacing. It recorded a yield superiority of 25.17%

over non-Bt zonal check (NH 615), 26.58% over Bt zonal check (Suraj Bt) and 79.68% over non-Bt local check. This variety has an average boll weight of this entry is 3.5 grams across the locations and years with a potential attainable boll weight of 4.1 grams obtained at Surat during AET 1 (2021-22). This medium staple Bt cotton variety has a mean fibre length of 23.4 mm and mean fibre strength of 24.3 g/tex across locations and years. The potential fibre length of the entry is 27.4 mm at Surat during IET (2020-21) and potential fibre strength of 26.5 g/tex at Surat during AET 1 (2021-22). Variety ICAR-CICR 18 Bt has ginning out turn (GOT) of 35.1% with the potential of 38.9% recorded at Surat during IET (2020-21). This new variety combines good tolerance to pest and diseases and the farmers will be highly benefitted by cultivating this genotype. This variety can contribute to increasing the higher productivity in rainfed conditions of Central zone of India.

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