



RESEARCH ARTICLE :

Development of non-spiny brinjal from spiny brinjal through conventional breeding

■ **B.K. SAVITHA, M. PANDIYAN, P. VEERAMANI AND T. BALAJI**

ARTICLE CHRONICLE :

Received :

11.07.2017;

Accepted :

26.07.2017

SUMMARY : The Spiny brinjal (*S.melongena*) var. VRM-1 is a familiar and promising variety in Vellore district and also main dish to make a Ennai Kathirikai for briyaniside dish purpose. The spines in the stalk is a major constraints for picking and handling of brinjal fruits. A breeding initiative was undertaken at Agricultural Research Station and Krishi Vigyan Kendra, Virinjipuram to mask the spiny traits through crossing programme. The crosses were attempted to develop non-spiny brinjal with spiny quality. The both parents are pure for respective spiny and non-spiny. A total of 18 crosses were made with spiny brinjal and non-spiny brinjal progenies. The true F1 was tagged in both crosses combination. In F1 plant population of Spiny x Non-spiny, 100 per cent of the plants expressed spiny nature. In F1 plant population of non spiny x spiny reduced percentage of partial spiny plants were observed. From this study in both cases spiny plants are observed in F1 generation which indicates spiny is expressed as dominant characters. Further generation studies were made with continuous selfing programme and the results revealed that 100 per cent non-spiny plants were obtained with high yield from cross derivative of non-spiny x spiny 3rd cross and 5th cross during fourth generation. Comparative trials were carried out during *Kharif* 2015 and *Rabi* 2015-16 with spiny brinjal VRM-1. Mean performance showed that genotype non-spiny x spiny 3rd cross (1.43 kg/plant) registered the highest fruit yield per plant followed by non-spiny x spiny 5th cross (1.56 kg/plant). These genotypes could be used for further breeding programme for the improvement of fruit yield and non-spiny trait.

KEY WORDS :

Non-spiny brinjal,
Conventional
breeding

How to cite this article : Savitha, B.K., Pandiyan, M., Veeramani, P. and Balaji, T. (2017). Development of non-spiny brinjal from spiny brinjal through conventional breeding. *Agric. Update*, **12**(TECHSEAR-1) : 206-209; DOI: 10.15740/HAS/AU/12.TECHSEAR(1)2017/206-209.

Author for correspondence :

B.K. SAVITHA

Agricultural Research
Station and Krishi
Vigyan Kendra
(T.N.A.U.),
VIRINJIPURAM (T.N.)

INDIA

Email:savi_horti@
yahoo.co.in

See end of the article for
authors' affiliations