

YF 5-2-7: A carotenoid rich genotype of watermelon

B.R. Choudhary, M.K. Berwal and P.L. Saroj

ICAR-Central Institute for Arid Horticulture, Bikaner (Rajasthan)-334 006

e-mail: choudharybr71@gmail.com

Watermelon [*Citrullus lanatus* (Thunb.) Mansf.] is an important crop grown in different parts of country. It is one of the most widely cultivated crops in the world and its global consumption is greater than that of any other cucurbit. Presently the red fleshed varieties are widely cultivated in India. The major nutritional components in watermelon consist of carbohydrates (6.4 g/ 100g), vitamin A (590 IU) and lycopene (4100 µg/ 100g) in red flesh varieties. Presently the red fleshed varieties are widely cultivated in India which contain low amount of carotenoid content. Now a day's people are very conscious to health issues and there is demand of varieties rich in carotenoids. Therefore, breeding for specific flesh coloured varieties is often a challenge to attract consumers. Watermelon being highly cross pollinated crop possess varying flesh colour viz., red, white, yellow and saffron having different profile of nutrients. Keeping in view, identified and homogenized a saffron coloured genotype of watermelon (YF 5-2-7) which is rich in carotenoid content. YF 5-2-7 is high in carotenoid content (8.70-9.61 µg/ g FW) in comparison to popular red fleshed varieties which have 3.92-4.14 µg /g FW carotenoid content. It is characterized by entire (non-lobed) leaves, round fruits having dark green rind with very narrow stripes, saffron flesh and blackish brown seeds. YF 5-2-7 produced round fruits weighing 2.5-3 kg, rind thickness (1.0-1.3 cm), TSS (10-11%) and bear 3-4 fruits/ plant. Fruits ready for harvesting in 80-85 days after sowing. The developed line of watermelon (YF 5-2-7) having saffron coloured flesh with high carotenoid content will the purpose of nutritionally rich variety in future.



YF 5-2-7: Carotenoid rich watermelon