

# Assessment of Sprouting Broccoli (*Brassica oleracea* L. var. *italica*) Genotypes for Growth, Yield and Quality.

U. Thapa<sup>1</sup>, R. Mondal<sup>2</sup> and A. Das<sup>3</sup>

<sup>1,2,3</sup>Department of Vegetable Crops Bidhan Chandra Krishi Viswavidyalaya  
P.O.-Krishi Viswavidyalaya, Mohanpur, 741252, West Bengal, India  
E-mail: <sup>1</sup>dr.umeshthapa@yahoo.in, <sup>2</sup>revamondal1@gmail.com

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**Abstract**—*Sprouting Broccoli (Brassica oleracea L. var. italica) is one of the most important exotic vegetables gaining popularity in recent days. Growing of exotic vegetables are now more profitable enterprise than cultivation of traditional Indian vegetables because of its growing market demand and increasing health consciousness of people. Sprouting broccoli is highly rich in nutrients particularly vitamin A and it content sulforaphane compound which having anti-cancerous property. The high nutritional qualities indicate that the cultivation and consumption of this crop may be helpful in overcoming the nutritional deficiencies predominant in many rural areas of the country and boost the socio-economic condition of the society. In Indian scenario especially in the plains of West Bengal the research work on sprouting broccoli is in meagre, therefore till date farmers are not aware of suitable performing genotypes for this zone. So keeping this background in mind present study was investigated at Horticultural Research Station, Mondouri, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia in West Bengal during the year (2014-2015) with objectives to evaluate and standardize the genotypes of sprouting broccoli for growth, yield and quality attributes particularly in new alluvial zone of West Bengal. Seventeen genotypes of Broccoli were taken for investigation to find out the suitable promising genotypes. The experiment were laid out in Randomized Block Design with three replications. On the basis of performance of varieties related to head yield and concerning yield attributing characters, Early You performed best and the highest head yield of 149.74 q/ha. Among all the genotypes regarding the sprout yield, the genotype Princes has shown promising performance of 3.61 kg sprouts per plot. In review of the quality, most of the quality parameters have been found best from the genotypes Early You, Fiesta and Grand Sino. The most important quality parameters like ascorbic acid and total carotene content has been found maximum from the genotype Early You of 108.17 mg/100 gm and 11.36 mg/100 gm, respectively followed by Nok guk (103.90 mg/100 gm of ascorbic acid) and Fiesta ( 10.49 mg/100 gm of carotene content).*

**Keyword:** *Sprouting Broccoli, Genotypes, Yield, Quality.*