

**P-11 (83)****THE PENTA AND TETRA ROOTSTOCKS EFFECT ON QUANTITATIVE AND QUALITATIVE CHARACTERISTICS OF VARIETIES OF GREENGAGE DABEIE SHAHRIAR**

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Greengage Dabeie Shahriar is an important cultivars native of Iran and because of its early maturity, large size and substantial income, the cultivation of this fruit in warm and temperate regions is increasing. Generally, this fruit is propagated on Seedling rootstock Greengage Sagak (*P. domestic* cv. Sagak) and due to its high sensitivity to Phytophthora disease and lack of uniformity on this rootstock, the fruit on a new rootstock which is particularly short and resistant to the disease is spreading in the country. In this study, the effects of tree rootstocks Penta, Tetra and seed on vegetative characteristics (stem diameter, tree height, area and volume of the crown), reproductive characteristics (onset of flowering, full flowering, ripening fruit) and quantitative and qualitative characteristics of fruit ( number, weight, volume, Ph, TSS) Greengage Dabeie shahriar cultivar were evaluated for three years. The results show a significant difference between the effects of different rootstock on qualitative and quantitative traits of the cultivars under study. Studies show Penta rootstock increased 20 percent in the trunk cross-sectional area (TCSA) are induced compared with the most seed rootstock vigor. Most of Greengage fruit weight of 8.9 gr is based on the rootstocks Penta. The highest average yield in the trunk cross-sectional area 226.72 (gr × cm<sup>2</sup>) was on the Penta rootstock; tetra and seed rootstock were 198.71 and 94.68 respectively. The result of the study indicated that there is a significant difference among the various vegetative characteristics within the rootstocks and the type of the rootstock affects the vegetative growth (vigor), yield, fruit weight, fruit quality.

**Keywords:** rootstock, Greengage Dabeie shahriar's, qualitative and quantitative properties, vegetative and reproductive traits