**What are seedless table grapes?**

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Grapes are one of the most commonly produced fruit crops in the world and an important fruit commodity that allows good profits to producers. According to their characteristics, grapes can be considered for different uses: wine production (varieties with higher acidity and moderate sugar content), table grapes for fresh consumption (varieties with low acidity, low sugar, and specific standards of size, color, and shape), and raisins (varieties with low acidity and high sugar). In the last years cultivation and consumption of table grapes (*Vitis vinifera* L.) has increased considerably, mainly due to seedless varieties. Consumers appreciate the absence of seeds and are willing to pay more for sweeter and more firm seedless grapes. However, for many people the term “seedless” has a negative connotation, associated with negative health effects or even genetic manipulation. Seedless grapes exist naturally or may be manipulated by plant breeders without using genetic engineering techniques. Is possible to distinguish two mechanisms of seedlessness: parthenocarpy (when the ovary can develop without fertilization of the ovum) and stenospermocarpy (embryo abortion occurs after fertilization, and partially developed seeds or traces of seed are visible). Shelf-life of seedless grapes is expected to be longer than seeded fruits, because seeds produce hormones that activate senescence. The current table grapes breeding programmes are designed to obtain varieties with good characteristics and mandatorily seedless. So, the absence of seeds, shape, colour, skin thickness, resistance against diseases and pests, ability to be transported without damage and shelf-life are the main criteria to select new varieties. However, those who think that these new seedless table grape varieties are a new development, you are mistaken! There are records of this type of grapes since the 19th century. The most widely commercialized seedless table grapes varieties in the world are Thompson seedless (first seedless variety cultivated in the world), Crimson and Autumn Royal. In recent years, the post-harvest research group at the University of Évora has developed several works, in partnership with regional enterprises, in the characterization and quality evaluation of several varieties of seedless table grapes.

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