

Title Measurement method of lenticels density on the surface of some fruits and vegetables
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Abstract

In some fruits and vegetables, there exist channel-like structures extending radially from the surface into the center in the form of a web. These channels have openings to the air on the surface. Size, intensity, and structure of them vary according to cultivars. Mouths, i.e., the opening, of the lenticels, found on the surface of fruits or vegetables, are made up of corky cells. Gaseous exchange namely, entry of the oxygen and exit of carbondioxide, input and output of the metabolism, occurs through these openings. Water loss in the form of evaporation occurs not only through the cuticles but also through the lenticels. Size and intensity on the surface of lenticels affect cold storage, shelf life and water loss of fruits and vegetables. Also, saprophytic elements enter through lenticels causing deterioration of fruits and vegetables. In this study, in order to determine the feasibility of the method surface lenticel intensity was determined in some fruits (oranges, mandarins, pears and apples) and vegetables (cucumbers, tomatoes, eggplants). For this purpose pressured air was provided into the center of fruit and vegetable produces submerged into water. Then, number of air bubbles released on the surface of the produce was counted and lenticel intensity as number of lenticels per square centimeter (number/cm²) was determined.