Title Describing sensory characteristics of globe artichokes

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Citation ISHS Acta Horticulturae 942:427-431.2012.

Keywords descriptive quantitative analysis; organoleptic quality; sensory attributes

Abstract

Brittany is the main artichoke production area in France. Mainly two globe artichoke varieties are marketed: 'Camus' and 'Castel'. Commercial distinction is done between these two varieties but little is known about their sensory characteristics and more generally about sensory quality changes of artichoke. This study was conducted with the aim to develop a detailed sensory profile of artichoke and to characterize the organoleptic properties of these varieties. Descriptive sensory analysis was performed by a panel of ten assessors. A list of thirty descriptors relating to odour, texture and flavour of artichoke was developed by panel consensus after tasting and discussions. All hedonic terms were avoided. The panellists were trained to recognise characteristics related to descriptors in products and to quantify their intensity. Assessments of 'Camus' and 'Castel' were performed for three harvest dates, each variety has been evaluated five times by panellists. Analysis of variance on data shows significant differences between cultivars on nine descriptors out of 30: earth odor, firm, crunchy, fibrous, pasty, gritty, nuts flavour, butter flavour and bitter taste. Differences between varieties according to harvest dates are also identified. In order to communicate about sensory properties of artichoke varieties, it is necessary to select characteristics on which differences are robust between dates of harvest. The list of descriptors and the panel can also be used to know much about sensory variability of artichoke.