## Local cherry varieties in sustainable production, biodiversity preservation and rural development

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## Abstract

The increasing importance of local varieties of horticultural crops is imposing as the answer to growing awareness of biodiversity importance for sustainable agricultural production and rural development. This importance is reflected in two segments. The first segment is the biological, genetic, and technological, as a source for traits in breeding new varieties adaptable for marginal growing areas and potential robustness in the case of biotic and abiotic stresses, but also in their value to be grown just in their original form as a local variety. The second segment is their socio-economic value for rural communities where they might be of use just for their intrinsic value in traditional (and organic), but in any case, sustainable agricultural systems. Local varieties have specific importance because they are a sort of "trademark" for their producing regions, as they are unique and limited only for these regions. There are several such regions in Croatia, including Mediterranean part and continental part of the country, with their differences in environments.

In the context of their uniqueness, they have potential for rural development of specific producing areas, either for their limited availability for general market, or for their exceptional quality that is a result of specific environmental conditions such as climate, soil and relief, or just production methods. Therefore, local fruit varieties and the products made from these varieties may be of high socio-economic importance for rural communities as a part of offer "on the farm" or local green markets, but also as an integral part of the activities in rural tourism of their area of production. In this paper we give the brief history of local sweet and sour cherry production in the territory of Croatia. We provide the overview of nine local varieties (two of them are sour cherry), including their pomological description and producing specificities, their importance as "local trademarks" in socio-economic sense, their brief description with the focus on the traits that are of value for production and genetic pool for selection in the changing climate and growing requirements for biodiversity preservation and sustainability.