

Title Proposal for a flavour standard - sensory profiles of European white *Asparagus officinalis* L. cultivars

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Abstract

In Europe white cooked asparagus (*Asparagus officinalis*) is particularly appreciated during the asparagus season as a gourmet vegetable. Therefore it should be "butter-soft, full-bodied and pleasantly mild". That means in the words of asparagus breeders and producers that asparagus must not be fibrous, woody or stringy. It should exhibit a full flavour, not too mild or tasteless, but characterised by a pleasant bitterness and a bit of sweetness. In recent years these characteristics as well as 20 other quality parameters were quantified in numerous asparagus assortments. The sensory profiles of the cultivars were established. In experiments of several years it could be stated that there are correlations and mechanisms which lead to higher or lower popularity of the asparagus. These results are presented in order to recommend their practical application for a successful marketing. The taste of asparagus is influenced by the cultivar, the growth conditions and the post-harvest treatments. However, based on the results of a two-year experiment in a model study it is shown that a classification of the cultivars concerning the asparagus flavour can be successfully performed. In this study 12 European cultivars were evaluated. The effects of the cultivars on the consumer's acceptance are represented. If the regional characteristics of a production location are well-known, only few cultivars are sufficient for such an assortment of standards. It can serve as comparison for the cultivar selection to lay out a new area for cultivation, or for purchase recommendations according to the customer's favoured flavour.