Title Susceptibility of southern highbush and rabbiteye blueberry cultivars to postharvest diseases in Huelva, Spain

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Abstract

Blueberry (*Vaccinium* spp.) is becoming a high value crop in Spain. Its production is increasing steadily, particularly in the southwest. The growing area in Huelva (SW Andalusia, Spain) is about 250 ha. The fruit is harvested by hand and marketed as fresh fruit for export. Berry diseases and post harvest fruit rots have not been a major problem, but as the blueberry industry expands, fruit diseases will increase in importance. Fruit can be infected at any time after bloom, but infections often are not visible until berries begin to ripen. At harvest, infected berries may be soft and leaky, or may have masses of fungal spores growing on their surfaces. The extent of postharvest deterioration of blueberries by fungi depends on the postharvest conditions and inoculum potential. The most serious fruit diseases are caused by *Colletotrichum* spp. (anthracnose fruit rot), *Alternaria* spp. (Alternaria rot), *Botrytis cinerea* (Botrytis rot or gray mold), *Monilinia vaccinii-corymbosi* (mummy berry) (Hanson et al., 2000). Little information is available on the relative importance of these diseases on major blueberry cultivars grown in Spain. As far as we know there is no information on postharvest diseases of blueberries grown in Spain. The purpose of this study was to determine which diseases were occurring on harvested fruit of three Southern highbush and three rabbiteye cultivars planted in research plots five years ago, and the relative rot susceptibility of these cultivars on early and late ripening rot. Postharvest decay on berries of the 6 cultivars tested was very low throughout the season. Rot scores for berries after 10 days incubation at 25°C and 100% relative humidity from all causes was 16.7 and 10.7 % of the Southern highbush berries harvested from the first and last picking date, respectively. Rabbiteye cultivars showed the lowest percentage of rotten berries, only 11.1 and 10.9 % from the first and last harvest dates, respectively.