

Use of seeds from local loquat ecotypes for rootstock production

Giovanni Gugliuzza, Marcello Militello and Giuseppe Talluto
Consiglio per la ricerca e la sperimentazione in agricoltura Unità di ricerca per il recupero
e la valorizzazione di specie floricole mediterranee CRA SFM

Vittorio Farina
Dipartimento di Scienze Agrarie e Forestali- Università degli Studi di Palermo

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Abstract

In Italy, loquat (*Eriobotrya japonica*, Lindl) seedlings are commonly produced in nurseries and used as rootstocks for commercial loquat orchards. Seedling production is characterized by low germination percentage and slow plant growth. The aim of this study was to evaluate seeds from local loquat ecotypes for production of seedlings. Local ecotypes (Bianco dolce, BRT20, Claudia, Fiore, La Mantia and Marcenò) and international cultivars (Algerie, Golden Nugget, Magdal, Peluche and Tanaka) were included in the trial. Seeds were collected from mature fruits in commercial orchards. A pretreatment of 24 hr of seed soaking in a solution of 1% hydrochloric acid (HCl) was compared to untreated raw seeds. At 15 and 30 days from sowing, germination data were collected. After 90 days from sowing, plants were transplanted in 2-L pots. The highest percentage of germination was recorded for Bianco dolce, in both treatments (80%), and for Peluche treated with HCl, while the lowest percentage was recorded for untreated seed of Algerie (25%) and Marcenò (10%). HCl pretreatment increased germination only in Marcenò (from 10% to 50%) and Fiore (from 45% to 75%).