

## Scab-immune cultivars having prospects for apple breeding

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During preselection research into the *Malus ×domestica* Borkh. specimens was done to broaden the genetic diversity of cross breeding components for faster creation of cultivars of adaptive and technological orientation.

The research was done from 2010 to 2015 at the Krymsk Experimental Breeding Station in Krymsk, a branch of the department of pomiculture of Kuban State Agricultural University. The method of randomized repetitions of a six-fold replication was used for the field test. The type of soil was grey forest. Scab-immune apple cultivars of diverse ecological and genetic origin that are promising for the southern zone of pomiculture in Russia were studied — ‘Reanda’, ‘Retina’, ‘Relina’, ‘Renora’ (Germany), ‘Enterprise’, ‘Gold Rush’ and ‘Pristine’ (USA).

Passports and genealogies of donor cultivars and sources of valuable characters were developed. Mathematical certainty of differences of the factors of valuable characters was calculated: specific efficiency, crop capacity, fruit marketability of the promising apple cultivars in cultivation using the adaptive type of technology in the south of Russia.

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**Keywords:** breeding, donors, genealogy, *Malus ×domestica*, new source material, technology of cultivation, valuable characteristics