Low-chill Peach Evolution and Cultivar Improvement

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Abstract

Peach production mainly distributes to the central and northern part of Taiwan, and can be divided in high mountain and low land types. In order to lessen the environmental impact due to high mountain plantation, research finance is supported by the government to develop low-chill peach cultivars for sustainable development of peach industry. For decades, 3 cultivars named 'SpringHoney', 'Xiami', and 'Chunfeng', are released by Taiwan Agricultural Research Institute and planted for more than half of the cultivation area. 'Premier' was used as mother parent in the cross combination of these 3 cultivars. For pollen parent, 'Flordabelle' and 'Flordared' were used, both cultivars contained 'Elberta' in their genetic background. 'Elberta' a offspring derived from good selection of 'Shanghaishuimi', which was introduced to United States in 1850. It reveals that 'Shanghaishuimi' not only plays an important role in the ancestry of peach cultivars in Taiwan, but also in the world.

Key words: Peach, Low-chill, Breeding, Ancestry.