

Title Large-scale standardized phenotyping of apple in rosbreed
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Citation ISHS ActaHorticulturae 945:233-238. 2012.
Keyword fruit quality; pedigree-based analysis; marker-assisted breeding

Abstract

The USDA - Specialty Crop Research Initiative-funded RosBREED project is focused on enabling marker-assisted breeding in the *Rosaceae*. New molecular tools for selection need to be developed before this technology will be widely accepted and applied to apple breeding programs. As well as detailed genotypic data of inter-related progenies, parents and ancestor cultivars, fully descriptive phenotypic data also need to be collected. For apple, fruit phenotyping begins at harvest, followed by 10 and 20 weeks regular storage, each followed by 7 days shelf life at room temperature. The standardized phenotyping protocols agreed by breeding teams in Washington, Minnesota and New York states will be presented in this paper.