ROSBREED DISEASE × HORTICULTURAL -

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Cultivar Corner

SNAPDRAGON™ TESTED AS NY 1



Inventors: Susan K. Brown and Kevin E. Maloney, Cornell University

Susan Brown answers some questions about this apple cultivar, recently released from Cornell University (2009).



SnapDragon[™] in the box highlighting its crisp texture. Consumers particularly liked its flavor and aromas. Photo: S.K. Brown

What makes SnapDragon™ special?

SnapDragon[™] is a very precocious, productive tree. Fruits have exceptional quality, with crisp texture, good juiciness, high soluble solids concentration, and pleasant aromatic flavors. It has had excellent consumer response.

How long did it take to develop this cultivar?

The cross was made in 1998. The seedling first fruited four years later and trees were immediately propagated for both testing at Cornell and for grower trials. This fast-track testing enabled us to go from cross to commercialization in 11 years – an extremely fast pace for commercialization.

What is the pedigree of SnapDragon™?

Honeycrisp is the maternal parent and the paternal parent is a New York advanced selection that has quality similar to Jonagold but is diploid. It was derived from Starkspur Golden Delicious \times a Monroe \times Melrose selection.

What is the size of the family from which SnapDragon[™] was selected?

381 seedlings, a small family size for apple breeding.

What was it that caused you to select and then fast track this selection?

The original seedling was the first tree in a long row. When we sampled it at the start of our evaluations, I teased my assistant that we couldn't select the first tree in the row. We noted it, went back again, and quickly decided that the taste, crispness and juiciness later characterized as "monster crunch" justified a fast track process. We propagated on a large scale the first year of testing, which is unusual. The highest compliments I received about this apple were from a 90-year-old apple grower who declared it "the best apple I have ever eaten" and a four-year-old who declared it the "bestest apple ever!" High praise indeed, from both ends of the age and experience spectrum.

How will this cultivar be used in RosBREED?

This genotype, along with its ancestors and some of its sister seedlings, is being used for discovery and validation of genetic loci controlling important fruit quality traits, including its outstanding fruit quality characteristics, some of which are derived from its 'Honeycrisp' parent. Knowing the origin and inheritance of these factors will aid the development of the next generation of increasingly exceptional cultivars.



United States Department of Agriculture

National Institute of Food and Agriculture RosBREED is a Coordinated Agriculture Project composed of a multi-state, multi-institution, and multi-disciplinary team of scientists dedicated to the accelerated genetic improvement of U.S. rosaceous crops using diagnostic DNA tools. This project is funded through the USDA-NIFA Specialty Crop Research Initiative by a combination of federal and matching funds.



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