

Researchers develop new high-yield pear cultivar

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A new pear cultivar, “Gem,” was released by the U.S. Department of Agriculture, Michigan State University, Oregon State University, and Clemson University. The new cultivar is resistant to fire blight disease, and its flavor is sweet and mildly aromatic. Credit: Steven Castagnoli, Oregon State University

A new pear cultivar, 'Gem', has been released jointly by the U.S. Department of Agriculture (USDA), Oregon State University, Michigan

State University and Clemson University. Gem is ideal for the fresh market, combining high yields with excellent appearance, fruit quality and long storage potential. The new cultivar is resistant to fire blight and isn't prone to brown discoloration, called "superficial scald," that affects some pear varieties.

Horticulturist Richard Bell, at the Agricultural Research Service's (ARS) Appalachian Fruit Research Station in Kearneysville, West Virginia, and his colleagues describe Gem in the March 2014 issue of *HortScience*.

Gem requires at least 3 weeks of cold storage before normal fruit softening, but it will last for at least 28 weeks in cold storage without core breakdown or superficial scald. The fruit can also be eaten immediately after harvest without softening, as it has a crisp, juicy texture. Its flavor is sweet and mildly aromatic. When compared to Bartlett, a popular pear variety, sensory panelists rated Gem similar in appearance, flavor and purchase intent.

The original seedling tree of Gem was from a cross of 'Sheldon' and US62563-004 made in 1970. Bell selected Gem in 1981 from the seedling orchard at the ARS Henry A. Wallace Beltsville Agricultural Research Center in Beltsville, Maryland.

The source of Gem's fire blight resistance comes from the cultivar 'Barseck'. Subsequently, Gem was evaluated for [fruit](#) quality, [fire blight](#) resistance and productivity in replicated trials at the Kearneysville location and at research centers at Washington State University, Oregon State University, Michigan State University, Cornell University and Clemson University.

Gem is recommended as a fresh-market pear for both commercial and home orchards. While budwood of Gem is limited, genetic material of this release will be deposited in the National Plant Germplasm System,

where it will be available for research purposes, including development and commercialization of the new cultivar.

Provided by Agricultural Research Service

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