

Superior Winter-Hardy Plum Cultivars

INVENTORS • Brian Smith

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A plant breeder who specializes in the development of winter-hardy fruits has now produced a winter-hardy cultivar called Blacklce™ Plum for the fresh market.

OVERVIEW

There is a demand to grow high quality plums and other fruits in northern climates where they have not been cultivated in the past. Increasing the range of these fruits can be economically promising because of increase of fruit production and the possibility of less transportation to bring the fruit to the place of sale. These more hardy plant varieties are produced by combining previously established plant varieties known for specific traits (i.e. fruit color, taste, hardiness, etc.).

THE INVENTION

Blacklce™ Plum is the result of a cross between the 'Oka' cherry plum and a conventional Japanese dessert plum (*Prunus salicina*) known as 'Z's Blue Giant.' Oka has in its lineage *P. besseyi*, a native North American plum species adapted to northern climates. *P. besseyi* can withstand severe winters and generally is more productive and ripens one month earlier than *P. americana*, a native plum more commonly used to produce hardiness in new hybrids. Blacklce™ Plum yields fruit that rivals many California-grown dessert plums in flavor and appearance, and matures two to four weeks earlier than any other large, high-quality plum grown in the Midwestern U.S. Blacklce™ Plum also grows and yields fruit in the U.S. Department of Agriculture's hardiness zone 3b (-30 to -35 degrees Fahrenheit) and above, making it suitable for production in northern climates. Blacklce™ Plum exhibits a naturally compact growth habit and good graft compatibility with most common plum rootstocks. The new plum cultivar also shows average susceptibility to brown rot (*Monilinia fructicola*) and black knot (*Dibotryon morbosum*), and is more tolerant to bacterial spot (*Xanthomonas campestris* pv. Pruni) when compared to most Japanese-American hybrids grown in the Midwest.

KEY BENEFITS

- Produces fruit similar to many conventional, California grown plums: large, dark-blue

THE WISYS ADVANTAGE

WiSys Technology Foundation serves the University of Wisconsin System comprehensive campuses by patenting and licensing discoveries to leading companies in Wisconsin, the United States and worldwide. Established in 2000 by the Wisconsin Alumni Research Foundation (WARF) and the UW System, WiSys is building the next generation of patent and licensing opportunities by fostering collaborations among campuses, private research organizations and industry, facilitating high-tech research with grant programs, and promoting student training for employment in a knowledge-based economy. WiSys's income is distributed to the UW campuses, the inventors and their departments to grow future discoveries and educational opportunities.



to black in color, nearly round in shape, and with excellent flavor

- Shows superior winter hardiness, yielding fruit in the USDA hardiness zone 3b (-30 to -35 degrees Fahrenheit)
- Matures 2-4 weeks earlier than any other large, high-quality plum grown in the Midwestern U.S.
- Exhibits a naturally compact growth habit, making trees easier to manage
- Yield is comparable to popular, conventional cultivars
- BlackIce's™ overall disease tolerance is similar or superior to that of plum cultivars commonly grown in the Midwest

ADDITIONAL INFORMATION

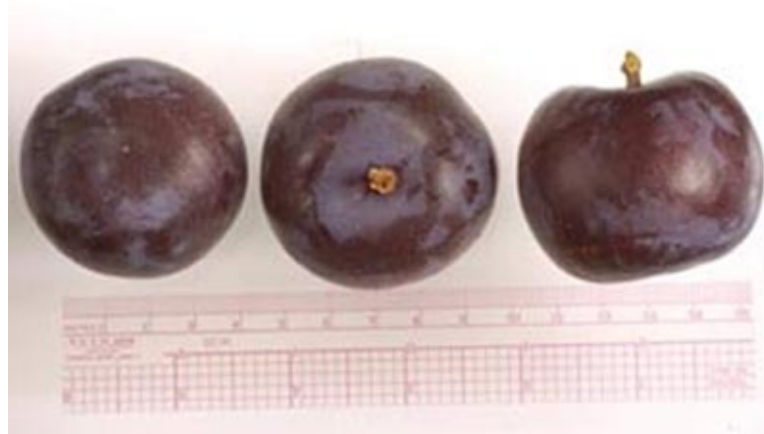
Tech Fields

Agriculture - Plant varieties

CONTACT INFORMATION

For current licensing status, please contact Jennifer Souter at jennifer@wisys.org or (608) 316-4131.

FIGURES



The 'BlackIce plum' (photo courtesy of Brian Smith).