ISLANDER: A GOLDEN NEMATODE RESISTANT POTATO VARIETY FOR FRESH MARKET AND CHIPPING

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Abstract

The Islander potato variety is a medium maturing variety with oblong, shallow-eyed, white-skinned tubers. High dry matter and good chip color characterize this variety which is better adapted to Long Island, New York and New Jersey than to other northeastern areas. It is resistant to golden nematode and net necrosis; moderately resistant to common scab and early blight; and less susceptible than most varieties to acid scab and Rhizoctonia. The Islander is a product of the cross Chipbelle × Norchip.

Resumen

La variedad de papa Islander es de precocidad media, con tubérculos de ojos oblongos, superficiales y piel blanca. Alto contenido de materia seca y buen color al freir caracterizan a esta variedad que está mejor adaptada a Long Island, New York y New Jersey que a otras áreas del Nor-Este. Es resistente al nematodo dorado y a la necrosis reticulada; moderadamente resistente a sarna común y a la marchitez temprana; menos susceptible que la mayoría de las variedades a sarna ácida y a Rhizoctonia. La variedad Islander es producto del cruce de Chipbelle y Norchip.

History

The Islander potato variety is a product of the University of Maine Agricultural Experiment Station potato breeding program located at Aroostook Farm in Presque Isle, Maine. The cross which produced this variety was made in 1970. The complete pedigree is given in Figure 1. The female parent, Chipbelle, was released by the USDA in 1981. It is resistant to golden nematode and has potential for both chipping and tablestock markets. Norchip, the male parent, was released by North Dakota in 1968. It is an early maturing chipping variety with high solids. Evaluation of the seedlings from the cross of Chipbelle with Norchip resulted in the selection of one of them, 1

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designated AF 186-5, for further testing. In 1976 this selection was tested for golden nematode resistance at the USDA Northeast Regional Laboratory at Cornell University, Ithaca, New York. The selection has been widely tested in the Northeast Regional Variety Trials (NE-107) since 1977. Commercial trials were conducted in Maine and New York in 1981 and 1982.

![Pedigree of Islander](image)

Results of regional variety trials indicated that this selection was adapted to New York and New Jersey potato growing areas. Good chip color was found in many of the NE-107 locations. Commercial trials in 1981 showed the good storage qualities of this selection. These features and the common scab resistance found in Maine and New York tests prompted the release of the selection as the Islander variety (1). The name reflects the adaptation of this variety to Long Island, New York, where golden nematode has been a problem.

**Description**

PLANTS: Medium maturing (approximately 100 to 110 days); moderately large, spreading. Stems: primarily deep red over entire length, with some green stems; nodes only very slightly swollen; moderately prominent wings. Leaves: light green with short sparse pubescence; somewhat open. Terminal leaflets: ovate-oval with acute tip and rounded base; mean blade length 81.5 mm, mean width 53.5 mm, index 66. Primary leaflets: oval with acute tip and slightly unequal base; three pairs; mean length 69.4 mm, mean width 41.7 mm, index 60. Secondary leaflets: several to many. Tertiary leaflets: few or none. Midribs: green or with very slight red color; slight short pubescence. Petioles: red with moderate short pubescence.