Hudson: A High Yielding Variety Resistant to Golden Nematode


Hudson, a new potato variety, was approved for release by the College Seed Committee of the New York State College of Agriculture on November 17, 1972. Hudson, initially given the pedigree number E121-2, was later coded NY-41. The pedigree of Hudson is as follows:

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\begin{align*}
\text{Hudson} & \quad \{ \\
56N18-4 & \quad \{ \\
X96-56 & \\
1107-14 & \\
B3945-6 & \\
\text{NIF-1} & \\
\text{Kennebec} & \\
\end{align*}
\]

The cross between Kennebec and B3945-6, made by L. C. Peterson resulted in a population segregating for golden nematode resistance. The progeny 1107-14 x X96-56 was one of a series produced by A. E. Kehr at Iowa State University in 1955 for a study of combining ability for yield (3). The cross between NIF-1 and 56N18-4 was made by R. L. Plaisted in 1962 as part of another series of progeny tests (1).

Description

Plants — Growth habit: maturity in New York comparable to Katahdin. Vines are very large and spreading. Stems: non-pigmented, nodes are slightly swollen and wings are prominent. Leaves: dark green, smooth and open. Terminal leaflets have an acute tip, obtuse base, and are asymmetrical. The index of width to length is .74. Primary leaflets: large, ovate with an acute tip and asymmetrical, occurring in three pairs. The index of width to length is .66. Secondary and tertiary leaflets are few. Midribs and petioles: green and slightly pubescent.

Flowers — Buds: pale purple with a yellowish tip. Petals do not cover the anthers in the youngest buds, and in older buds, the stigma extrudes. Calyx lobes: long, narrow, green and moderately pubescent. The newly opened flower is pale purple and of medium size, similar to that of Katahdin. Anthers: bright yellow with abundant, fertile pollen. Hudson was successful in 23/54 crosses as a female and 107/238 crosses as a male in 1972.

Tubers (Fig. 1) have a mean length of 96 mm, a mean width of 83 mm, and a mean thickness of 67 mm. The index of width to length is .89, of thickness to length is .72, and of the thickness to width is .81.

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Fig. 1.—Tubers of Hudson (NY-41) and Katahdin.