

'Wealthy' Apple

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Early settlers of the northern areas of the American Great Plains were constantly looking for fruit cultivars that would flourish in this harsh environment with short humid summers and long cold winters. In 1860 Peter M. Gideon of Excelsior, Minnesota had \$8.00 left after feeding and clothing his large family for the winter. He sent at least part of that money to Albert Emerson of Bangor, Maine and received scion wood for 'Duchess,' 'Blue Pearmain' and 'Cherry Crab' apples. He also received seed from the 'Cherry Crab' from Mr. Emerson which he planted. From this lot of seed grew the 'Wealthy' apple. Peter Gideon said "... I began fruit culture in Minnesota by planting thirty named varieties of apples, a good collection of pears, plums, cherries and quinces, a bushel of apple seed and a peck of peach seed, and yearly for nine years planted more trees and seeds, and all kept as long as they could live in Minnesota, and at the end of ten years all died except for one small seedling crab." (6).

'Wealthy' quickly became a popular apple in the north central states. In 1882 Suel Foster of Muscatine, Iowa praised 'Wealthy' for its hardiness, precocity, high yields and fruit quality in the Iowa Horticultural Society Report for that year (5). In 1902 the Experiment Station Reports for Kansas and South Dakota describe desirable apples for planting in these states. Kansas found 'Wealthy' to be too vigorous and upright, producing fruit which are "not of the best quality." (3) However, N. E. Hansen of South Dakota found 'Wealthy' to be a desirable apple for his state (9). 'Wealthy' was also

described and recommended for cold northern areas by Beach in Volume 2 of his Apples of New York (1).

'Wealthy' was cited in early popular pomology books including Downing's *The Fruits and Fruit Trees of America* (4) and Hedrick's *Cyclopedia of Hardy Fruits* (10). Although it was planted primarily in North America, 'Wealthy' was mentioned in at least one British publication (13) where it was also reported that 'Wealthy' was exhibited in the Imperial Fruit Show in 1925. Bultitude reports that 'Wealthy' was given the Award of Merit from the Royal Horticultural Society in 1893 (2).

Despite its early popularity, 'Wealthy' is remarkably free of synonyms and sports. 'Hydes King' was the only synonym reported by Ragan (12). 'Peter' is an apparent seedling offspring (9). French describes only one sport of 'Wealthy,' Double Red 'Wealthy,' which originated on the James G. Chase farm near Sodus, New York in 1933 (6).

'Wealthy' fruit is medium to large sized and uniform in shape and quality. Fruit shape is round to oblate. The ground color is pale yellow to greenish with a bright red striped or splashed overcolor. The flesh is white, sometimes stained with red, tender very juicy, somewhat aromatic and is generally rated good to very good. The fruit ripens unevenly on the tree. If not picked several times much of the fruit will drop before harvest. The tree is smallish in stature but grows vigorously when young (1, 2). 'Wealthy' was widely planted as a "filler" tree that was later removed when the main trees filled their allotted space and as

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'Wealthy' fruit quality declined. As trees age fruit size diminishes unless a good thinning program is instituted.

In 1915 'Wealthy' production was 2.2% of the national total; by 1964 it was less than 1% of the total apple production (6). While 'Wealthy' was never a major apple on a national scale, it has been an important cultivar in the North Central region. In a survey of Wisconsin orchards in 1894, E. S. Goff discovered that 'Wealthy' accounted for 15% of the trees in reporting orchards; second only to 'Duchess' (8). As late as 1960 'Wealthy' comprised 14.2% of the apple trees found in commercial orchards in Wisconsin (14). Even in 1991 'Wealthy' trees were 8.1% of the total number of apple trees in the northern growing area of Wisconsin, primarily Bayfield County (15). Although 'Wealthy' is not widely planted today, it is propagated and available from at least 27 commercial nurseries (11).

Residents of the North Central states should be grateful for the persistence of Peter Gideon who showed that good apples can be successfully grown in this environment if proper genetic material is used.

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'Baskatong' as an Indicator of Pollen Spread in Intensive Orchards

The *Malus* cv 'Baskatong' possessing a dominate gene for red leaf color was planted in various intensive orchards and over a period of 3 to 7 years seeds were gathered from various distances and directions. The 'Baskatong' flowering period did not fully cover three of the apple cultivars due to a shorter bloom period. Growth of red seedlings indicated no distinct directional effect but with increasing distance from the pollenizer, the percentage of red seedlings declined sharply. Although red seedlings were occasionally found as far as 40 m from the 'Baskatong' tree most occurred within a radius of 5 m and this distance should be considered when planning intensive plantings. From Westheim. 1991. *J. Hort. Sci.* 66:635-642.