

oblate; greasy; acid, astringent, inedible; calyx persistent. Tree: vigorous; productive; fruits drop as they ripen. Leaves: lobed. Small, green, greasy, inedible fruit.

The following were developed by H. Dermen, USDA-ARS, Bureau of Plant Industry, Soils, and Agricultural Engineering, Beltsville, Maryland 20705-2350, United States. Donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

**PI 589199. *Malus domestica* Borkh.**

Dermen McIntosh 4X. Pedigree - By disbudding young trees of Kimball McIntosh (A mixture of 2x-4x-4x and 2x-4x-2x), Dermen obtained both 2x and 4x adventitious shoots. This Dermen Mc Intosh was derived from the 4x shoots, about 1949.

The following were developed by Judge Mooney, Granby, New York, United States. Donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

**PI 589200. *Malus domestica* Borkh.**

Mann. Pedigree - Chance seedling. Comments:: Fruit: size large, 75-85mm; skin grass green; shape round- oblate; flesh hard, cream-colored; flavor subacid; eating quality fair; harvest season very late, early November, 4 wks after Delicious. Tree: vigorous, very large; productive strongly biennial. R.D. Way, 1991. Hard, green, late keeping.

The following were developed by George L. Barkley, Manson, Washington, United States. Donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

**PI 589201. *Malus domestica* Borkh.**

Barkley Rome. Pedigree - Rome Beauty red-fruited bud mutation. Comments:: Fruit: indistinguishable from Rome Beauty except skin color is redder; 90% red; color pattern splashed; less red than Law Rome. Red mutation of Rome Beauty.

The following were donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

**PI 589202. *Malus domestica* Borkh.**

Hubbardston Nonsuch. Pedigree - Unknown; first recorded 1832. Comments:: Fruit: size large, 75-85 mm; skin 40-90% dull orange-red, striped, scarfskin, greasy, not highly attractive; shape round-conic; flesh firm, cream-colored; flavor subacid, rich eating quality better than fair; harvest season mid-October, 1 wk after Delicious. Tree: extremely biennial cropping; fruits drop as they ripen. Large, dull red, fairly good quality.

The following were developed by Canada Department of Agriculture, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

**PI 589203. *Malus domestica* Borkh.**