

The following were developed by Cornell University, New York Agr. Exp. Station, Geneva, New York 14456, United States. Donated by Irrigated Agric. Research Ext. Center, P.O. Box 30, Washington State University, Prosser, Washington 99350, United States. Received 08/30/1984.

PI 588941. *Malus domestica* Borkh.

Jonagold. Pedigree - Golden Delicious x Jonathan. Cross made 1943. First fruited 1953, described by L.G. Klein. Intro: 1968. Comments:: Large fruit, striped red over bright yellow. Firm cracking, juicy, slightly tart flesh. Superb, rich full flavor. Finest dessert eating quality; good cooking properties. Will store in common refrigerator for 3 months. Tree: very productive, excellent orchard behavior, sturdy vigorous, fairly wide spreading. Triploid, requires pollinator. Susceptible to scab and mildew. Ripens from mid-Sept. to late Oct, depending on location. Requires 700-800 hrs chilling. Additional LIT.CIT. 1992-93. H. Apple. Tsolum River Fruit Trees. p. 21.

The following were developed by G.W. Schneider. Donated by Irrigated Agric. Research Ext. Center, P.O. Box 30, Washington State University, Prosser, Washington 99350, United States. Received 08/30/1984.

PI 588942. *Malus domestica* Borkh.

Julyred. Pedigree - Developed in New Jersey as the result of a long and complex breeding program. NJ8 (Petral x Early McIntosh x [Melba x {Williams x Star}]). Selected 1955; Intro: 1962. Tested as NJ21. Comments:: Medium size red fruit. Firm, tasty flesh. Ripens late in July. Attractive; firmer, has better shelf life, better shipping ability than most other early summer apple varieties. Ripens about with Melba.

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PI 588943. *Malus domestica* Borkh.

Liberty. Pedigree - In existence 1895; described 1867. Macoun x Purdue 54-12 Intro: 1978. Comments:: Size medium; shape tall to intermediate conic to rectangular convex; skin yellow flushed and striped red; flesh firm, fine, yellowish; flavor sweet, juicy, subacid. Good for eating fresh, cooking; stores until Feb with flavor intensified. Tree: hardy, vigorous, productive, annual; requires thinning. Most disease resistant apple developed; scab fire blight, mildew and cedar apple rust; No spraying needed. Ripens early Oct. Requires 800 hours of chilling.

The following were donated by USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Washington, District of Columbia 20002, United States. Received 09/14/1984.

PI 588944. *Malus kansuensis* (Batalin) C. Schneider

Calva. Comments:: Similar to *Kansuensis* except underneath leaves, calyx and pedicels and glabrous. Not ornamental. Flowers: single; 2 cm diameter; white. Fruit: 1 cm diameter; yellow.

**PI 588945. *Malus toringoides* (Rehder) Hughes
Cutleaf Crab.**

The following were donated by Curator, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97330, United States. Received