

'Enterprise' and 'GoldRush', Two New Disease-Resistant Cultivars

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'Enterprise' and 'GoldRush' are two new apple cultivars, the eighth and ninth releases derived from a cooperative apple breeding program involving Purdue University, Rutgers, the State University of New Jersey, and the University of Illinois. Each contains the V_f gene for scab resistance derived from *Malus floribunda* 821. Both new cultivars are late maturing, with excellent texture and exceptionally good storage life. These two apples represent a significant advance in fruit quality combined with good storage ability over present late-maturing disease-resistant cultivars. Patent protection is being pursued.

'Enterprise,' formerly Co-op 30 (PRI-2693-1 = CLR4T38), is a medium to large sized apple maturing 2.5 weeks after 'Delicious' and with 'Rome Beauty' (Oct. 17 to 25 at Lafayette, Indiana), round to elongated in shape, occasionally lopsided, 90 to 100% medium red with a smooth and glossy finish. Lenticels can be conspicuous. At harvest fruit often has a green-yellow undercolor that changes to yellow in storage which improves the appearance. Flesh is medium grained, firm, crisp and breaking at harvest, remains firm and crisp in storage; flesh color is pale yellow to cream; relatively thick skin. Quality is very spicy, rich, and sprightly acid at harvest. Quality is at its peak after one month in storage. Retains quality and texture six months or more at 1°C. Field immune to apple scab,

highly resistant to fire blight, resistant to cedar apple rust, and moderately resistant to powdery mildew. Tree is spreading, round topped, vigorous, with a standard bearing habit. Fruits are borne singly on long spurs, and hang well on the tree even when overripe; moderate to good annual bearing. Blooms late midseason.

'GoldRush,' formerly Co-op 38 (PRI 2750-6 = HER4T16) is a medium sized apple maturing 3.5 weeks after 'Delicious' (Oct. 20 to 30 at Lafayette, IN), ovate and regular, greenish yellow at harvest developing to deep yellow in storage. May develop bronze blush on sun exposed cheek. Skin is nonwaxy, tender, thin to medium in thickness with conspicuous russetted lenticles. Flesh is medium coarse-grained, firm, very crisp and breaking. Very spicy and sprightly at harvest with full rich flavor. Quality is very good and improves to excellent in storage. Keeping quality is superior, texture and flavor is retained in storage for at least 7 months at 1°C. Field immune to apple scab, moderately resistant to fire blight, resistant to powdery mildew, but susceptible to cedar apple rust. Tree is slightly upright, moderately vigorous, limited branching, with semi-spur bearing habit. Fruits are borne singly on short spurts, and hang well on the tree even when overripe; some biennial tendency. Bloom is late season. Late maturity may limit its northern adaptability.

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