

'P448-2' (Green Jade™) Pear

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'P448-2' is an early, productive, large, green/russet pear (*Pyrus communis* L.) with some tolerance to the fireblight disease incited by *Erwinia amylova* (Burr.) Winslow et al. (Fig. 1). The fruit is pleasant to eat either when firm or when soft upon ripened. The pear was patented under the name 'P448-2' and will be sold under the trade-marked name Green Jade™. It has a short storage life but is well suited for home gardens. 'P448-2' is the second pear cultivar developed by Purdue Univ. Experiment Station.

Origins

The selection derives from seed derived from a cross of US 386 x NJ 3 ('Star') sent by the late Dr. L. Fredric Hough, Rutgers Univ. The progeny was screened for fireblight in the nursery and the seedling was selected in 1975 under the progeny number Purdue 448-2. The pear has been evaluated at West Lafayette, Vincennes, and New Salisbury, Ind., and Louisiana, Mo. The pedigree is diagrammed in Fig. 2.

Description

The following is a detailed description of the flowers, fruit, tree, and leaves with color designations according to the horticultural colour chart issued by the Royal Horticultural Society of London (2001).

FLOWERS

Size: Medium 29 mm in diameter.

Petal: Shape: oval.

Color: White (RHS 155D).

Stamens: 4 to 5 mm, white.

Anthers: Red purple (N74D).

Pistil: 4–5 mm, fused at base, yellow-green (154A).

Pollen: Yellow.

Fragrance: Typical.

FRUIT

Shape: Oblong to ovate, symmetrical typical length to diameter ratio of 1.2; no ribbing or lobes on calyx end.

Size: Typically 71 mm wide x 76 mm long.

Cavity: None.

Basin: Shallow, ≈5 mm deep and 20 mm in diameter; no pubescence.

Stem: Long (39 mm) and stout (3.6 mm) in diameter; grey orange (165A).

Locules: Closed, seeds free from carpel at maturity.

Skin: Thin, fine, with a moderately shiny finish and no tendency to become waxy or oily in storage; russeting can be extensive.

Lenticels: Inconspicuous.

Color: Yellow-green (145A) to green-yellow (1B); often russeted, predominantly at base.

Acidity: 0.232 g/100 mL as malic acid (firm); 0.250 g/100 mL (soft).

Firmness: At maturity, 5.7–8.2 kg, averaging ≈7.3 kg.

Soluble solids: 11.0% to 11.8%, averaging ≈11.4%.

Flavor: Mild sweet.

Texture: Crisp when firm, and buttery to melting when ripened.

Flesh color: Yellow-white (158C).

Aroma: Slight.

Core: Bundle area shape is basal, meeting, median, ≈33 mm long, 30 mm wide; core lines are weakly defined.

Seed: Typically 1 to 2 per cell; shape is acute at tip and round at base, 8 mm long, 5.5 mm wide.

Season: First week of August in southern Indiana.

Storage: Fruit can be kept at room temperature for ≈1 week, can be kept in refrigerated storage (1 °C) for ≈2 months.

Usage: Fresh use, can be consumed crisp or soft.

TREE

Vigor: Moderate, but more vigorous than 'Honeysweet' (Janick, 1977).

Shape: Upright to spreading.

Branches: Upright, emerging from the trunk at ≈30° to 40°, with angle of emergence increasing toward the top of the tree; no included bark, nonpubescent.

Branch color: 1- and 2-year-old branches are grey-orange (165B).

Branch lenticels: Sparse, oval, 0.5 mm diameter, grey white (156D).

Disease resistance: Tolerant to fireblight, similar to 'Honeysweet', sensitive to *Psylla* (*Cacopsylla pyricola*).

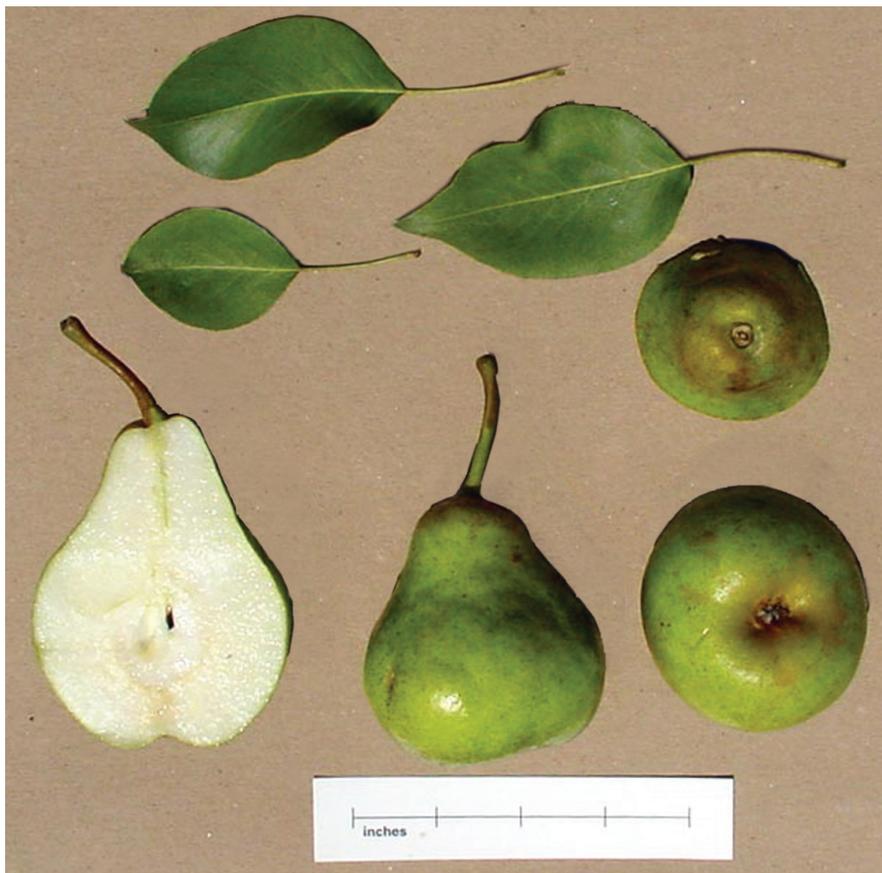


Fig. 1. 'P448-2' (Green Jade™) pear.

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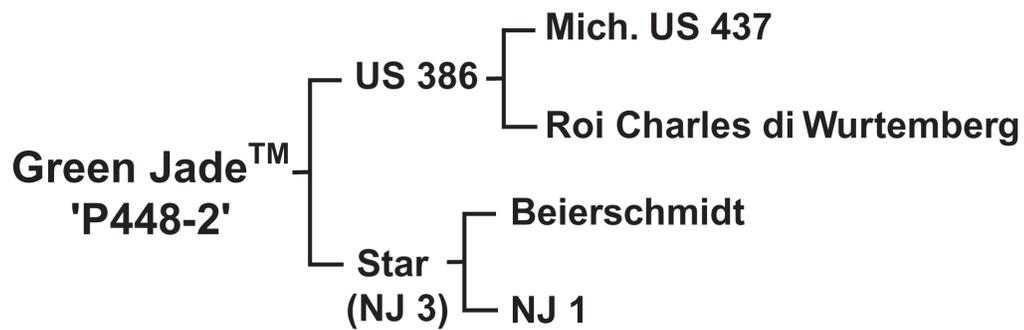


Fig. 2. Pedigree of 'P448-2' (Green Jade™) pear.

LEAVES

Texture: Smooth, leathery.

Sheen; Shiny.

Size: 66–91 mm long, averaging 74 mm; 43–53 mm wide, averaging 48 mm.

Petiole: 41 mm long, yellow-green (153B).

Tip: Acuminate.

Color: Adaxial green (137B); abaxial grey-green (194A), vein yellow green (154B).

Pubescence: None.

Availability

Green Jade™ is licensed in the United States by Gardens Alive! Inc, and is presently available from Gurney's Seed and Nursery Co. (phone 513/354-1491) and Henry Fields Seed and Nursery Co. (phone 513/354-1494). It is protected by U.S. Plant Patent number 14,034.

Literature Cited

Janick, J. 1977. 'Honeysweet' pear. HortScience 12:357.
 Royal Horticultural Society. 2001. RHS colour chart. Royal Hort. Soc., London.