#### **FRUIT**

Shape: round-conical, very regular.

Size: axial diam 6.0 to 7.0 cm (2½ to 2¾ inch), transverse diam 6.5 to 7.5 cm (2½ to 3 inch).

Color: undercolor "green-yellow" (plate 1 group D) to "yellow" (plate 3 group D); overcolor 60 to 90% medium red (plate 47 group B to plate 46 group C).

Skin: smooth, without bloom, weakly waxy, small lenticels, moderately tough. No russeting.

Stem: short, 0.8 cm (3/8 inch), below level of cavity, medium thickness.

Cavity: deep (18 mm), broad (35 mm), acute, slight streaky russet.

Basin: medium depth, narrow, without ribbing.

Calyx: short, erect, convergent, sepal bases free.

Calyx tube: Y shaped, closed.

Stamens: median.

Pistil: persisting, not fleshy.

Core: medium size, distinct line, flat-round.

Carpels: cell length short, medium breadth, round, open narrow aperature in transverse section.

Seeds: medium number, medium size, much longer than broad, moderately thick, obovate, apex acute, pale buff brown.

Flesh: "yellow" (plate II, group D), fine, juicy, medium sweet, acidity strong, aromatic, good quality.

Time of fruit maturity (for picking): midseason, 1-2 weeks before 'Delicious'.

Time of fruit ripening (for eating): midseason, Oct. to Jan.

Use: dessert.

### PLANT

Tree: medium vigor, spreading habit, open, tip bearing.

Leaves: narrow, length-to-width ratio = 1.9, lanceolate, biserrate, long, apex acuminate, rounded base, deep green, wavy edge, petiole length long and green, narrow and long stipules.

### Availability

Budwood is presently available from the Station d'Arboriculture Fruitiere, INRA, Beaucouze, Angers, France.

## Literature Cited

- D. F. Dayton, J. B. Mowry, L. F. Hough, Catherine H. Bailey, E. B. Williams, J. Janick, and F. H. Emerson. 1970. 'Prima'

  – an early fall red apple with resistance to apple scab. Fruit Vars. & Hort. Dig. 24:20-22.
- E. B. Williams, J. Janick, F. H. Emerson, D. F. Dayton, J. B. Mowry, L. F. Hough and Catherine Bailey. 1972. 'Priscilla', a fall red apple with resistance to apple scab. Fruit Vars. & Hort. Dig. 26:34-35.

# Wis. HBR 40 and Wis. HBR 72 Bean Germplasm

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Two processing lines of bean (Phaeolus vulgaris L.), WIS. HBR 40 and WIS. HBR 72, were released in 1970. They combine, for the first time, resistance to both race 1 and race 2 of the bean halo blight disease caused by Pseudomonas phaseolicola (Burkh.) Dows.

## Origin

Wis. HBR 40 was derived from a cross between a Wisconsin breeding line carrying University of Idaho 'Red Mexican No. 3' resistance to *P. phaseolicola* race 1 and selected plants of P.I. 150414 which are resistant to race 2. The resultant bean was then crossed and backcrossed to a bush blue lake strain.

Wis. HBR 72 was derived from a cross between a Wisconsin strain (with University of Idaho 'Red Mexican No. 3' resistance to *P. phaseolicola* race 1) and P.I. 150414. The most promising progenies were crossed and backcrossed to 'Slimgreen'.

### Description

Wis. HBR. 40 is a bush blue lake type

that is similar in maturity and in plants and pod type to 'Tempo' but pod color may be slightly darker. Wis. WHR 72 is a conventional processing type with good bush habit.

## Outstanding Characteristics and Uses

Wis. HBR 40 combines good vigor with dark green pod color, a bush plant habit, and resistance to both races of the halo blight pathogen. Flavor upon canning has been good, however, color was quite dark.

Wis. HBR 72 combines good vigor and plant characteristics with excellent resistance to both races of the halo blight pathogen. Canning tests indicate acceptable quality.

## Availability

Small amounts of seed are available and are offered free of charge to private and public researchers primarily for use as parental material in breeding programs.





Examples of greenhouse-grown Wis. HBR 40 (left) and Wis. HBR 72 (right) bean plants.