

The University of Minnesota

AGRICULTURAL EXTENSION DIVISION

\*Special Bulletin No. 5

University Farm, St. Paul

January 1916

Published by the University of Minnesota, College of Agriculture, Extension Division, A. D. Wilson, Director, and distributed in furtherance of the purposes of the cooperative agricultural extension work provided for in the Act of Congress of May 8, 1914.

## STANDARD POTATO VARIETIES FOR MINNESOTA

By C. E. Brown and Richard Wellington

The production of many and mixed varieties of potatoes is the source of an annual loss of thousands of dollars to potato-growers. This practice not only has the temporary effect of reducing the value of a crop, but sometimes prevents a community from securing a reputation very valuable as an asset. The remedy is simple: Eliminate all mixed varieties and propagate not more than two standard varieties in any one district. If varieties or seedlings are tested, it should be in a small way only so that there may not be a lot of undesirable stock to market. Variety testing is undoubtedly fascinating, but it is an expensive business, for probably not more than one new variety out of a hundred is superior to the standard sorts.

The quickest way for a community to succeed in potato-growing is to select the variety or varieties best suited to the soil and to market requirements, and to produce a sufficient quantity of good tubers to gain a wide reputation. This can be done only by community agreement on the variety or varieties to grow.

Some potato districts, as the Red River Valley and the region north of the Twin Cities, have recognized the importance of standardizing varieties, but most of the new districts and many of the old ones do not yet appreciate its importance.

At recent meetings of the Minnesota Crop Improvement Association and the newly organized Minnesota Potato-Growers' Association, committees were appointed to investigate this important subject. After a careful consideration of the commercial varieties grown in Minnesota, the committees recommend the varieties listed in this bulletin for specified soils and markets. The photographs, altho not perfect, are representative of the best type of each variety. The technical descriptions have been compiled by A. W. Aamodt from notes taken at the Minnesota Agricultural Experiment Station by himself and by A. R. Kohler, formerly of the Station. For information in regard to the improvement of varieties, Farmers' Library Bulletin No. 50, The Seed-Potato Plot, is worthy of careful study.

### Rural New-Yorker

The leading round, white, late potato for Minnesota; a good yielding and keeping variety, fine in quality, and an excellent market sort; suitable for almost any soil; very similar in all its characteristics to Carman No. 3, and Sir Walter Raleigh.

**Tubers.**—Medium to large. Shape, blocky, nearly round, considerably flattened, very broad. Stem and distal ends roundish. Surface even. Bud-eye cluster of medium size, lateral, shallow. Stem, central, medium; cavity, very small, somewhat narrow, shallow, irregular. Skin thin, moderately tender, slightly flaked at the distal end, white. Eyes, fairly numerous, of medium width, shallow, white. Eyebrows rather prominent to nearly inconspicuous, long, considerably curved. Flesh, fine, very firm, juicy, white.

**Plants.**—Large, spreading, rather open, very decumbent. Stems, upright and appear weak when young, later become medium size, very stout, much branched, light green with heavy purple tinge. Nodes, considerably swollen and much colored. Leaves, dark green. Flowers, few, purplish.

**Sprouts.**—**In light**—Stem, stout, purple, much branched. Base, enlarged, purple-streaked. End, light green, with deep purple tip. **In dark**—Stem, white with slight purple tinge, fairly branched, tip purple.

### Green Mountain

A desirable white, late potato, similar to the Rural New-Yorker but more oblong and with squarer ends. Better suited to rich, heavy soils than the Rural New-Yorker as they are not so likely to grow hollow. Very similar in its characteristics to Carman No. 1, Green Mountain Jr., and State of Maine.

**Tubers.**—Medium to large. Shape, blocky, short oblong, broad elliptical, flattened. Surface, fairly even. Distal end, slightly rounded to truncate; stem end, roundish to truncate. Bud-eye cluster, medium to large, nearly central, rather shallow. Stem, medium, central; cavity, medium in size, broad, medium to shallow, irregular. Skin, thin, rather tough, slightly flaked, white. Eyes, medium in number, small, shallow to nearly deep, regular, white. Eyebrows, rather inconspicuous, short, slightly curved. Flesh, fine, very firm, juicy, white.

**Plants.**—Very large, fairly compact, bushy, mostly decumbent. Stems, stout, very much branched, light green. Leaves, medium dark green. Flowers, very numerous, white.

**Sprouts.**—**In light**—Light green, base enlarged, faint pinkish white. End and tip light green. **In dark**—Slender, white with yellowish tip.

### Burbank

A long, white, late potato of excellent quality, suitable only for rich, loose, loam soils. Thrives well upon new rich soils that are well supplied with humus. When well grown commands good prices. Often confused with White Chief, White Star, and Pingree, which are inferior and coarser varieties.

**Tubers.**—Medium to large, fairly uniform. Shape, oblong to elongated elliptical, cylindrical to slightly flattened. Surface, nearly even; distal and stem ends, roundish. Bud-eye cluster, small, central, shallow. Stem, small, central to slightly lateral; cavity, very small, very narrow, very shallow, irregular. Skin, thin, tender, slightly netted, creamy white. Eyes, fairly numerous, of medium size, whitish, very shallow to slightly protuberant. Eyebrows, fairly prominent, of medium length, curved. Flesh, fine, firm, juicy, white.

**Plants.**—Large, compact, bushy, fairly erect. Stems, fairly numerous, rather light green. Leaves, darker green; flowers white.

**Sprouts.**—**In light**—Stems, dark to light green, much branched. Base somewhat enlarged, tinged with pink. Tips, light green to light pink. **In dark**—Stem, white with pinkish lower internodes. Tips yellowish.

### Burbank Russet

A long, russet, late potato differing mainly from Burbank in its heavily russeted skin. Very fine for baking. Suitable for low, moist, friable, and peaty soils.

**Tubers.**—Medium to large. Shape, oblong elliptical, rather flattened. Surface, rather even. Distal and stem ends roundish. Bud-eye cluster, small, nearly central, shallow. Stem, small, central; cavity, very small, shallow, irregular. Skin rather thick, somewhat tough, yellowish, rather finely to coarsely russeted. Eyes, moderate in number, small, very shallow to nearly protuberant, yellowish. Eyebrows, inconspicuous to a mere line, short, curved. Flesh, very fine, very firm, moderately juicy, white.

**Plants.**—Large, somewhat spreading, open and somewhat decumbent. Stems, fairly stout, much branched, light green. Flowers, rather numerous, white.

**Sprouts.**—**In light**—Stems, dark green. Base, enlarged and tinged considerably with pink. Tips, light green. **In dark**—Stems, white with slightly pink tinge.

### Early Ohio

The leading, oval, pinkish or flesh-colored early potato in Minnesota. Particularly suitable for black, rich, friable soils. Similar varieties are the Early Six Weeks, Ohio Junior, Acme, and Early Market.

**Tubers.**—Medium to large. Shape, broad, oval, plump, nearly cylindrical, regular. Surface, even. Distal and stem ends roundish. Bud-eye cluster, small, near center, very shallow. Stem, small, central; cavity, small to medium, shallow, irregular. Skin, thin, tender, with numerous and conspicuous papillae, pinkish or flesh-colored. Eyes, numerous, medium in size, shallow, pink. Eyebrows somewhat prominent, short, slightly curved. Flesh fine, fairly firm, juicy, white.

**Plants.**—Large, somewhat compact, bushy. Stems, medium, numerous, rather stout, considerably branched, medium light green. Leaves, dark green. Flowers, white.

**Sprouts.**—**In light**—Stems, light green with pinkish tinge, stout. Branches, numerous; base, enlarged, pinkish; end, light green. **In dark**—Stems, white; base, with pinkish tinge; tip carmine.

### Triumph

A round, red, very early potato, valuable for southern seed trade. Suffers severely from drought and therefore soils subject to this condition should be avoided. Similar or identical varieties are the Red Bliss, Bliss Triumph, and Stray Beauty.

**Tubers.**—Medium size. Shape, roundish, blocky, slightly flattened. Surface fairly even. Distal end roundish to truncate. Bud-eye cluster, large, lateral to central; medium to deep. Stem end, very truncate. Stem, small, central; cavity, very large, broad, deep to very deep, very irregular. Skin, thin, tender, solid red. Eyes, fairly numerous, medium in size, rather deep, reddish. Eyebrows, prominent, long, moderately curved. Flesh fine, firm, juicy, white.

**Plants.**—Medium size, more or less open to spreading, somewhat decumbent. Stems numerous, of medium size, well branched, light green. Leaves, rather dark green. Flowers, white to very light pinkish purple.

**Sprouts.**—**In light**—Stems and branches, light green with pink tinge near base. Branches, numerous. Base, enlarged, reddish. Tip, carmine. **In dark**—Stems, light green with reddish tinge. Tip, reddish.

### Irish Cobbler

A promising white, early, roundish potato, of good quality altho inferior to the Early Ohio. Not sufficiently tested but promising for southern seed trade. Similar varieties are the Extra Early Eureka and Hamilton Early.

**Tubers.**—Medium size. Shape, roundish to roundish oval, slightly flattened. Surface, uneven. Distal end, roundish, depressed. Bud-eye cluster, large, lateral. Stem end, very truncate. Stem, large, central; cavity, very large, broad, very deep, irregular. Skin, thin, tender, white. Eyes, fairly numerous, medium in size and depth. Eyebrows, rather prominent, long, decidedly curved. Flesh, fine, firm, fairly juicy, white, slightly streaked.

**Plants.**—Large, fairly compact, bushy, more or less decumbent. Stems, numerous, stout, considerably branched, light green. Leaves, rather dark green. Flowers, slightly lavender to whitish.

**Sprouts.**—**In light**—Stems, very stout, dark green, with a reddish tinge. Base, enlarged, pinkish. End light green with pinkish tip. **In dark**—Stem, white with considerable pink tinge. Tip, light carmine.

### King

A broad, oblong, reddish potato little known in the state. Suitable only for poor or worn-out sandy soils. Maggie Murphy is a similar, if not identical, variety.

**Tubers.**—Large. Shape, blocky, broad oblong, flattened. Surface, somewhat uneven. Distal end truncate. Bud-eye cluster, medium in size, nearly central, shallow. Stem end, roundish to truncate; stem, large, central; cavity, small, broad, shallow, irregular. Skin, moderately thick, slightly rough, reddish, with deeper red at distal end. Eyes, rather numerous, large, medium to deep, pinkish; eyebrows, prominent, long, curved. Flesh, fairly fine, firm; white, except at distal end, which is streaked with a pinkish tinge.

**Plants.**—Very large, fairly compact, bushy, and mostly erect. Stems, numerous, stout, angular, much branched, and light green with a pinkish tinge. Leaves, large, dark green. Practically never any flowers.

**Sprouts.**—**In light**—Stems, very stout, light green, with a reddish tinge. Base, considerably enlarged and very dark red. End, light green. **In dark**—Stems, stout, whitish, with a slight pink tinge. Base, enlarged. End, deep carmine.

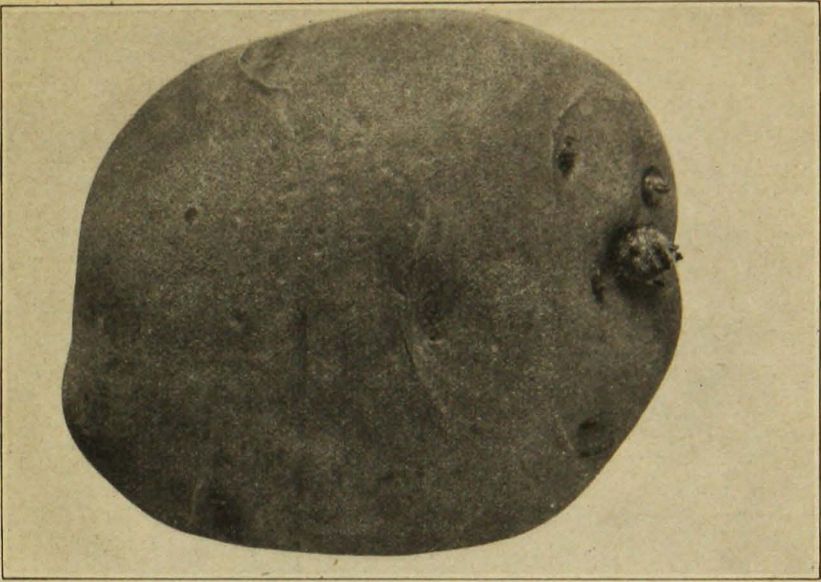


Fig. 1. Rural New Yorker

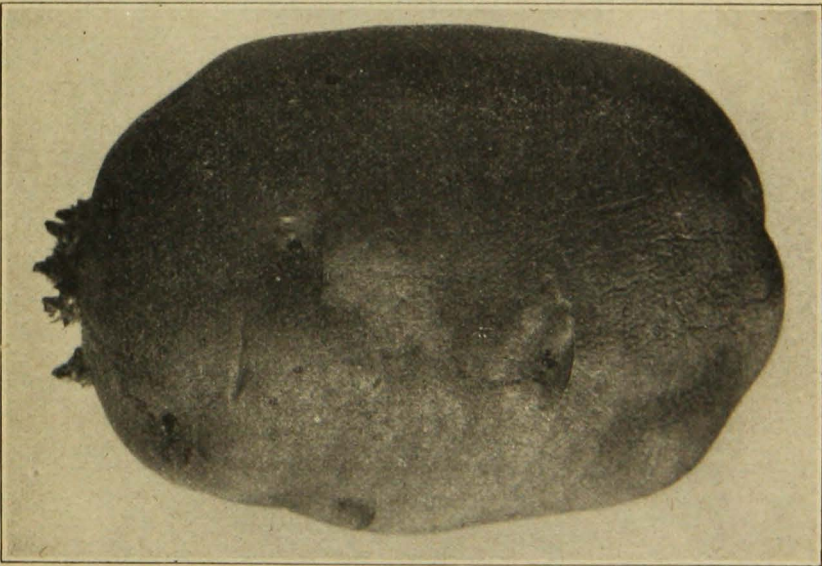


Fig. 2. Green Mountain



Fig. 3. Burbank

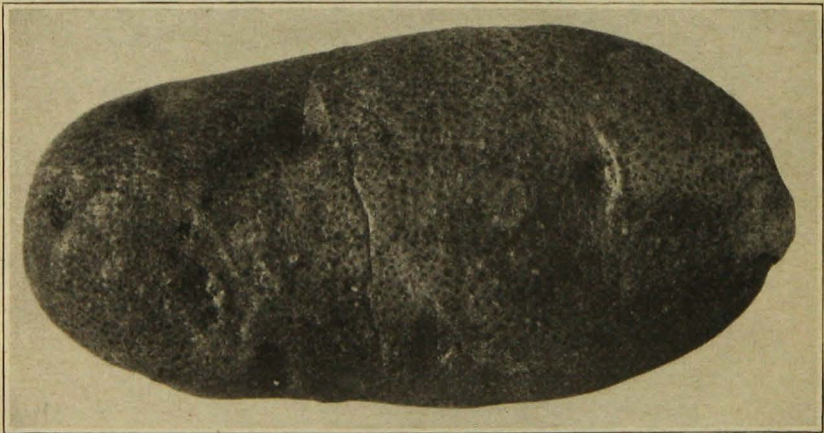


Fig. 4. Burbank Russet

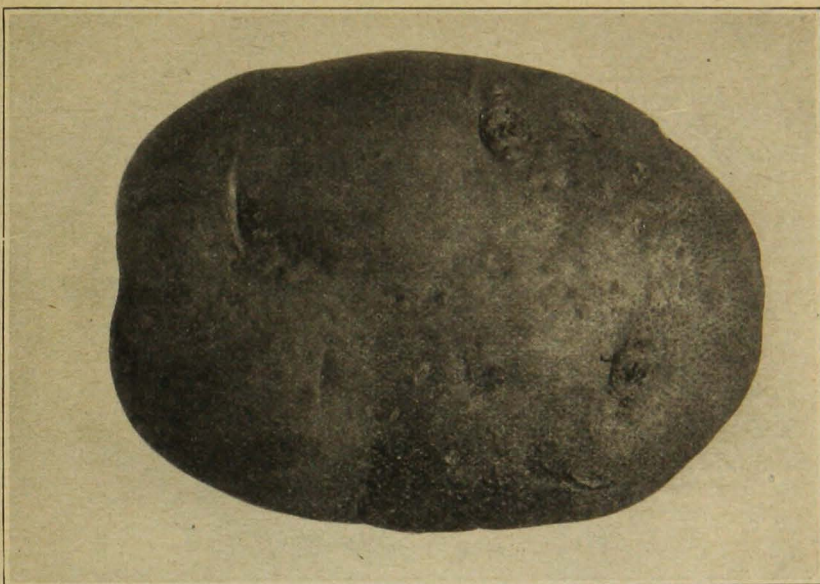


Fig. 5. Early Ohio

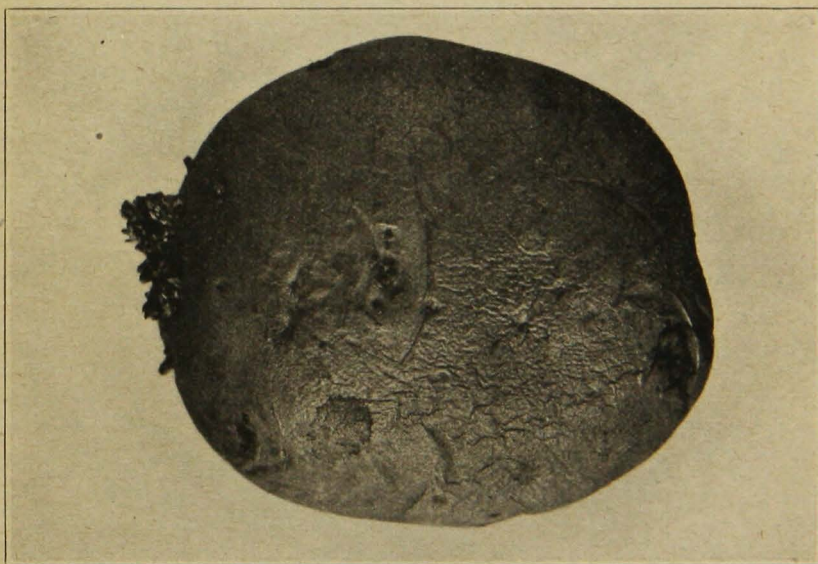


Fig. 6. Triumph

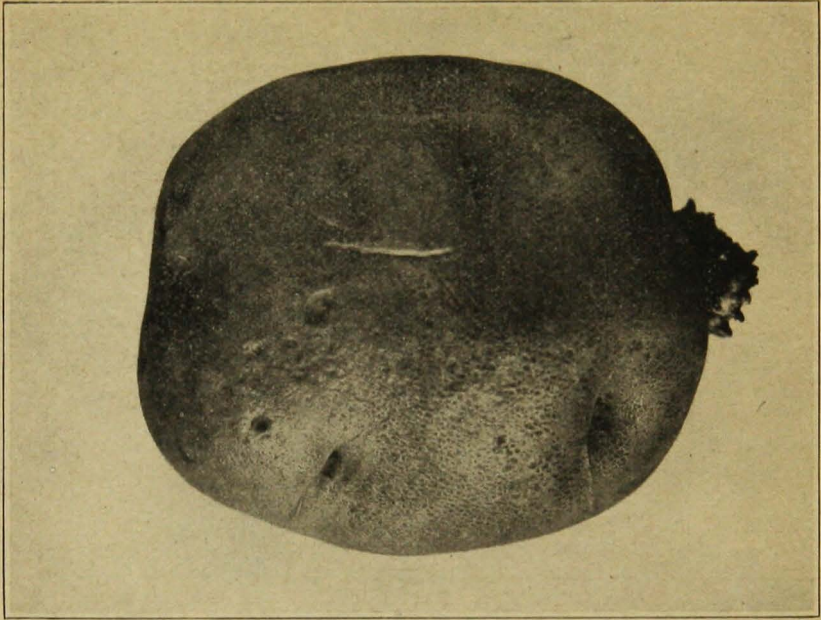


Fig. 7. Irish Cobbler

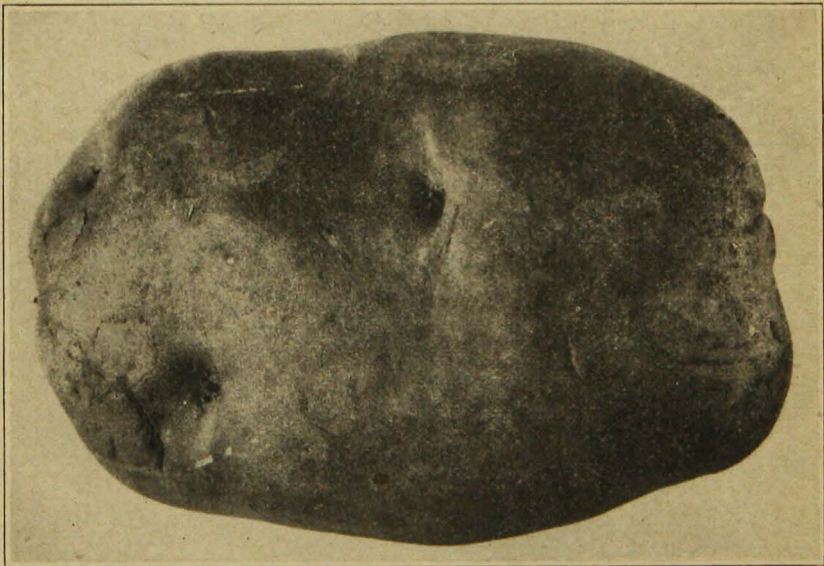


Fig. 8. King