

Evaluating Table Beets for Fall Harvest in Missouri

Lewis W. Jett, *Department of Horticulture, University of Missouri-Columbia*
1-87 Agriculture Building, Columbia, Mo 65211-7140.

Introduction

Beets are becoming a high demand item at most farmers' markets in Missouri. In particular, specialty types with different leaf and beet colors add diversity to vegetable displays. The objective of this evaluation was to examine several table beets for commercial production.

Materials & Methods:

Thirteen beet varieties were obtained from several companies representing a diversity of colors and shapes (Table 1). The beets were hand-seeded on 9/4 and 9/5/04 on raised beds (10 " height x 24" width x 60" length) at the University of Missouri Bradford Research & Extension Center near Columbia, MO. Each bed contained two parallel rows of beets spaced about 14" apart. One beet "seed" was seeded every 1.1". A single line of Queen Gil drip tape (4" dripper centers) was placed in the center of each bed. Each variety was replicated four times in a randomized complete block design. Approximately 350 lbs/acre of 13-13-13 fertilizer was applied resulting in the equivalent rate of 50 lbs of nitrogen/acre. No herbicides were applied. When the beets were 2" high, they were hand thinned to approximately 2" between each plant. On October 10, a light-weight row cover was placed over the beets to accelerate growth, and harvest was conducted as a "once-over" harvest on November 10, 2004. Beets were topped (leaving 3" of stem), sorted into size categories and weighed.

Results & Discussion

Table 1. Beet varieties evaluated.

Variety	Seed Source	Days to Harvest	Comments
Asgrow Wonder	Stokes Seeds	57	Uniform growth
Bull's Blood	Burpee Seeds	58	Dark red (cabernet) leaves; Striped roots
Centurion	Seigers Seeds	53	Dark red root/Uniform
Chioggia	Johnny's Seeds	55	Red/White striped roots
Early Wonder Tall Top	Johnny's Seeds	45	Early/Uniform
Forono	Johnny's Seeds	55	Cylinder shaped root
Golden Beet	Johnny's Seeds	55	Golden/light brown root
Moneta	Johnny's Seeds	46	Single germ beet seed
Pacemaker III	Seigers Seeds	53	Erect tops/Uniform
Red Titan	Seigers Seeds	52	Uniform growth
Warrior	Seigers Seeds	53	Uniform growth
White	Holmes Seeds	53	Light green leaves/white roots

Table 2. Marketable yields of table beets (roots only).

Variety	Marketable yield (per bed) ^z		
	<i>Small</i> ^y	<i>Medium/Large</i> ^x	<i>Total</i>
<i>Asgrow Wonder</i>	1.1	1.2	2.3
<i>Bull's Blood</i>	0.7	0.6	1.4
<i>Centurion</i>	1.1	2.6	3.7
<i>Chioggia</i>	0.6	1.3	1.9
<i>Early Wonder Tall Top</i>	0.9	1.7	2.6
<i>Forono</i>	1.0	1.2	2.2
<i>Golden Beet</i>	0.5	0.4	0.9
<i>Moneta</i>	0.6	1.8	2.3
<i>Pacemaker III</i>	1.4	1.6	3.0
<i>Red Titan</i>	1.0	1.1	2.1
<i>Warrior</i>	1.1	1.5	2.6
<i>White</i>	0.9	1.6	2.5
<i>LSD (0.05)</i>	0.4	0.7	0.8

^zEach bed contained two parallel rows. The area of each bed is 10 ft².

^ySmall roots: ≤ 1" diameter.

^xMedium/Large roots: ≥ 1" diameter.

Centurion was very uniform in root size and shape (Table 2). Yields of *Centurion* exceeded most of the red beets evaluated. *Warrior*, *Early Wonder Tall Top* and *Pacemaker III* are also uniform, high-yielding beet varieties.

Golden beet had a superb color, but did not seem to have the uniformity that the red beets exhibited. Nevertheless, it is an excellent colored beet. *Chioggia* has an attractive root with alternating red and white zones and attractive tops. *White* beet produced abundant top growth and an attractive white-fleshed beet root. *Forono* is a cylinder beet with a large portion of the upper beet root protruding from the soil. *Bull's Blood* is an extremely attractive beet with dark red leaves and a candy cane striped interior. However, it is an open pollinated variety and seems to lack the uniformity observed with most hybrids.