

BEET AND TURNIP VARIETIES UPDATE

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Beets and turnips are important crops for New Jersey vegetable farmers for both wholesale and retail markets. A variety trial was conducted in the late summer/fall of 2000 at the Rutgers Snyder Research Farm in Pittstown, NJ. This trial was done to determine yields of fall beets and turnips and to update variety selections for the Rutgers Commercial Vegetable Production Recommendations guide.

Varieties included in the study were as follows: **Beets** – ‘Centurion’, ‘Globe Dark Red’, ‘Red Ace’, ‘CXA95938’, ‘CXA95951’, and ‘Chioggia’; **Turnips** – ‘Royal Globe II’, ‘Royal Crown’, ‘Royal Crest’, ‘Hakurei’, ‘Purple Top White Globe’, and ‘Colletto Villa’. All beet varieties, except for ‘Chioggia’ were standard red table beet varieties. ‘Chioggia’ is a striped beet variety that has white and red centrifical rings through the root and light red to pink stems with light green leaves. All turnip varieties are purple topped roots with white bottoms, except for the variety ‘Hakurei’. ‘Hakurei’ is an all white rooted variety. Other individual variety characteristics are listed below:

Beets:

- ‘Centurion’ – Hybrid variety. Many leaves per plant, large dark green leaves with dark red veins in leaves, thick dark red stems. Overall good top and root quality. (Submitted by Siegers Seed Co. from Petoseed).
- ‘Globe Dark Red’ – 55-80 days to maturity. Many leaves per plant, large leaves with dark red veins in leaves, long dark red stems. Overall good top and root quality. (Submitted by Siegers Seed Co. from Hazera Seed).
- ‘Red Ace’ – Fewer leaves per plant, medium to small dark green leaves with thick red stems, medium height plants. Overall good top and root quality. (Shorter stems may tend to bunch better and not break as readily as longer stems). Seed company claims tolerance to bolt, Cercospora tolerant, powdery mildew tolerant, downy mildew resistant, Rhizoctonia tolerant. (Submitted by Siegers Seed Co. from Chriseed).
- ‘CXA95938’ – Hybrid variety. Medium leaf density per plant, larger dark green leaves, dark red stems, medium plant height. Fair top quality. (Submitted by Siegers Seed Co. from Chriseed).
- ‘CXA95951’ – Hybrid variety. Tall, narrow, upright dark green leaves with long dark red stems, smaller, dense leaves. Fair top quality. (Submitted by Siegers Seed Co. from Chriseed).
- ‘Chioggia’ – Open Pollinated variety. 55 days to maturity. Light green, wide leaves that are lighter green with pink stems and veins. Except for lighter color, top quality is good. Root color is stripes of red and white rings, internally. (Submitted by Agway, also sold by Johnny’s Selected Seeds and Plantation Products Inc.).

Turnips:

- ‘Royal Globe II’ – Hybrid variety. Purple topped roots with white bottoms, medium green leaves with few hairs, dense leaves with deep lobes. (Submitted by Abbott & Cobb Seed Co.).

- ‘Royal Crown’ – Hybrid variety. Purple topped roots with white bottoms, medium green leaves with deep lobes, some hairs on underside of leaves. Older leaves turned yellow earlier than other varieties. (Submitted by Siegers Seed Co. from Sakata Seeds).
- ‘Royal Crest’ – Hybrid variety. Purple topped roots with white bottoms, medium green leaves, fewer leaves than other varieties, some hairs on leaves, leaves are oak-leaf shaped. (Submitted by Siegers Seed Co. from Chriseed).
- ‘Hakurei’ – Hybrid variety. 38 days to maturity. Leaves are short (about 10-12”) and light green in color. Leaves resemble a smooth leaf type dandelion. Roots are all white and very tender. Roots should be harvested smaller than other turnip varieties. (Submitted by Agway, also sold by Johnny’s Selected Seeds).
- ‘Purple Top White Globe’ - Purple topped roots with white bottoms, leaves are deeply lobed with few hairs. (Submitted by Siegers Seed Co. from Chriseed)
- ‘Colletto Villa’ – 30-35 days to maturity. Purple topped roots with white bottoms, leaves have some lobes in the leaf margins and very few hairs. (Submitted by Agway from Plantation Products, Inc.).

Beets and turnips were seeded on August 10, 2000 on raised beds with 3 rows per bed at a spacing of 12” between rows. The beets were seeded with an “Earth Grow” hand seeder and the turnips were seeded using a “Planet Jr.” hand seeder. Dual herbicide was applied immediately after seeding and irrigated in. Insect control was done by applying Lorsban and Diazinon. Beets were harvested twice on October 25 and November 16. Turnips were harvested four times on September 28, October 11, October 25, and November 14. Beet harvests resulted in significant differences in yield. Table 1 shows yield data and significance. The best yield performing varieties were as follows: ‘Globe Dark Red’, ‘Centurion’, ‘CXA95961’, and ‘Chioggia’. Turnip harvests resulted in no significant yield differences. Yield results from the turnip harvests are shown in Table 2.

Table 1. Beet yields represented in boxes per acre (12 count bunches).

Beet Variety	Yield (boxes per acre)
Centurion	2934.25 a
Globe Dark Red	3040.13 a
Red Ace	2344.43 b
CXA95038	1512.50 c
CXA95951	2752.75 a
Chioggia	2707.38 a
LSD=0.05 (687.26)	**

Table 2. Turnip yields represented in bags per acre (25lb. Mesh bags).

Turnip Variety	Yield (bags per acres)
Royal Globe II	1483.95
Royal Crown	1295.19
Royal Crest	1138.37
Hakurei	2076.36
Purple Top White Globe	1623.34
Colletto Villa	1176.12
LSD=-0.05 (729.201)	NS