

2000 Home Demonstration Garden

Cynthia Haynes, assistant professor, horticulture

Introduction

Home demonstration gardens were located at ten sites across the state. Some of the themes for the 2000 gardens included organic tomatoes in straw bales, ornamental popcorn, and a salsa garden. Several varieties of potatoes, onions, dried beans, yellow tomatoes, salvias, and gazanias were also grown.

Materials and Methods

Most seedlings were grown in the ISU Horticulture greenhouses. The transplants were planted at research farms by the end of May. Potato seed pieces (except Gilroy) and onion transplants were planted directly in each garden in mid-April. Popcorn varieties were direct seeded into each garden in May.

Limited fertilizer and pesticides were used. Plants were watered at planting and then as needed throughout the growing season.

Five varieties of popcorn were grown in two rows of 18 ft. Transplants of six onion varieties were grown at each research farm. Twenty-five or more bulbs of each variety were harvested and stored in cool, dry locations for approximately three months. Tubers from five potato varieties were harvested and stored under similar conditions. At least 74 tubers of each variety were stored for approximately three months.

Two transplants of Garden Peach tomatoes were grown organically in straw bales. Bales were secured with metal stakes. Plants were fertilized with fish emulsion and sprayed regularly with a 3% undiluted hydrogen peroxide solution. Copper wire was inserted into the stems of tomatoes at some farms.

Other vegetables grown at the research farms included: five varieties of yellow tomatoes (Lemon Boy, Yellow Pear, Yellow Stuffer, Garden Peach, and White Wonder); five varieties of beans for drying (Vermont Cranberry, Midnight Black Turtle, Jacob's Cattle, Soldier, and Kenealy); five varieties of potatoes (Fingerling Salad, Yukon Gold, All Blue, Norland, and Gilroy); and a Salsa Garden with tomatoes (Salsalitto), tomatillos (Toma Verde and Purple de Milo), peppers (Garden Salsa and Delicias), and herbs (Cilantro and Oregano). All-American selections (Jolly tomato) and several varieties of flowers were also tested.

Results and Discussion

Vegetables. Robust and Strawberry popcorn varieties produced the largest ears in Nashua, but fewer numbers in comparison to the other varieties (Table 1). Red Mac, and Walla Walla onions had less than 50% survival after three months compared with other varieties tested (Table 2). The potato varieties fared considerably better in storage with 100% survival after three months (except for Gilroy). Eighty-four percent of Gilroy potatoes, a variety started from seed, survived after three months. All potato varieties were productive. The average weight (lb) per tuber for Fingerling Salad, Yukon Gold, All Blue, Norland, and Gilroy were 0.116, 0.264, 0.175, 0.252, and 0.167, respectively. Data will not be reported on organically grown tomatoes due to variability between farms. All varieties of beans were prolific with Midnight Black Turtle producing more than 2 lb of beans at Kanawha (data not presented).

Flowers. Rabbits were prevalent in many demonstration gardens, contributing to the poor performance of the gazanias and Vista series of salvia. The Daybreak gazanias were a

disappointment at all farms with small plants and few flowers (Table 3).

Table 1. Comparison of different popcorn varieties.

<u>Variety</u>	<u>Height (ft)</u>	<u>Total Yield (lb)*</u>	<u>Avg. wt per ear</u>	<u>Comments</u>
Tom Thumb	3	3.52	0.031	Early maturity; yellow kernels
Mini Blue	6	2.76	0.022	Dark blue kernels
Robust	9	8.74	0.168	Large yellow kernels
Strawberry	6	1.5	0.357	Dark red kernels; rounded cobs
Cutie Pops	8	4.7	0.042	Multi-colored kernels

* Dried to approximately 10 - 15% moisture content

Table 2. Onion weights and storage .

<u>Variety</u>	<u>Avg. wt. (lb)</u>	<u>% survival after 3 months</u>
Red Mac	0.659	0
Red Burger Master	0.356	89
Sweet Sandwich	0.784	72
Walla Walla	0.458	46
Candy	0.636	54
Copra	0.470	97

Table 3. Comparison of flower varieties.

<u>Variety</u>	<u>Flower Color(s)</u>	<u>Height and Width (in.)</u>	<u>Comments</u>
Gazania Daybreak	Orange, yellow, white, and pink	8 x 10	Poor performance; susceptible to rabbit damage
Portulaca			
Sundial Peach	Peach	6 x 14	AAS; compact, bloomed profusely
Sundial Peppermint	Pink with red stripe	6 x 14	Compact, bloomed profusely; interesting color combination
Zinnia Profusion White	White	12 x 12	Excellent performance
Salvia			
Victoria	Blue	18 x 15	Excellent performance
Strata	Blue/gray bicolor	18 x 15	AAS; Excellent performance
Coral Nymph	Peach	24 x 18	Uniform; flowers not showy
Vista Series	assorted	12 x 6	Uniform; susceptible to rabbits