

2005 Home Demonstration Gardens

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Introduction

Home demonstration gardens were located at nine sites across the state. The objective of the garden was to grow diverse plants in order to display and compare a wide variety of vegetables and flowers. The 2005 garden included a continental garden, summer squash, marigolds, basil, and black-eyed Susans. The continental garden included domesticated plants from four continental areas: Asia, Europe, Africa, and the Americas.

Materials and Methods

Most seedlings were grown in the ISU Horticulture greenhouses in Ames, Iowa. Transplants were transported and planted at research farms by the end of May. A few plants for the continental garden (chick peas, cowpeas, daikon, lentils, soybeans, beets, and snap beans) were directly seeded at each garden.

Limited fertilizers and pesticides were used. Plants were watered at planting and then as needed throughout the growing season. The amount of water applied at each garden varied considerably due to weather conditions.

Results and Discussion

Vegetables. Data from the Northern Research Farm and the Horticulture Station were collected from twelve cultivars of summer squash (Table 1). The scallop squash with the highest yield was Sunburst at the Horticulture Station. No plants of this cultivar, however, survived transplanting at the Northern Research Farm. Supersett and Zehpyr were the top performing yellow squash cultivars at the Northern Farm and Horticulture Station, respectively. While Elite, a popular zucchini cultivar, had the highest yield/plant at the Northern Research Farm, Raven, a relatively

new cultivar, had the highest yield/plant at the Horticulture Station.

Each farm also grew ten cultivars of basil: Bush Spicy Globe, Cinnamon, Dark Opal, Genovese, Lemon, Lettuce Leaf, Magical Michael, Purple Ruffles, Sweet, and Sweet Thai. All cultivars grew well at each farm. In general, the purple leaf types, Purple Ruffles and Dark Opal, were less vigorous than the other green leaf cultivars.

Flowers. Eight cultivars of annual black-eyed Susans (*Rudbeckia*) were grown at each farm. The cultivars included Becky Cinnamon Bicolor, Cherokee Sunset, Goldilocks, Hot Chocolate, Prairie Sun, Sonora, Toto Lemon, and Indian Summer. The three All-American Selection winners, Cherokee Sunset, Prairie Sun, and Indian Summer, were the most vigorous, blooming throughout the summer at each garden. Growth and flowering varied greatly with the remaining cultivars.

Sixteen cultivars of marigolds (*Tagetes*) were grown at each farm. Six of the cultivars were African marigolds (*Tagetes erecta*) and included Jubilee Diamond, Antigua Primrose, Crackerjack, Discovery Orange, Inca II Gold, and Snowdrift. Six of the cultivars were French marigolds (*Tagetes patula*) and included Aurora Yellow Fire, Durango Bolero, Disco Flame, Janie Spry, Safari Red, and Yellow Boy. Little Giant, Lulu, and Tangerine Gem were signet marigolds cultivars (*Tagetes tenuifolia*), and one cultivar was a hybrid called Cottage Red. All of the French marigold cultivars and the hybrid Cottage Red grew and bloomed well at all farms. The growth and flowering of signet marigolds and African marigolds was more variable. At most farms, the African marigold Snowdrift performed poorly, with little growth and few flowers.

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each participating farm was greatly appreciated throughout the duration of this project.

Table 1. Comparison of summer squash cultivars grown at two ISU Research and Demonstration Farms harvested from July 5 to August 8, 2005.

Northern Research Farm (Kanawha, Iowa)						
Type	Cultivar	Number of plants	Total number of fruit	Total weight (lb)	Weight per plant	Number of fruit per plant
Scallop	Flying Saucer	3	43	41.45	13.82	14.33
	Peter Pan	2	47	12.63	6.32	23.50
Yellow	Papaya Pear	2	46	23.81	11.91	23.00
	Seabring	3	64	37.47	12.47	21.33
	Supersett	2	83	29.75	14.88	41.50
Zucchini	Zephyr	2	56	21.20	10.60	28.00
	Costata	3	58	48	16.00	19.33
	Romanesco					
	Eight Ball	2	26	25.83	12.92	13.00
	Elite	3	67	76.3	25.43	22.33
Cousa	Raven	3	41	33.76	11.25	13.67
	Magda	2	44	50	25.00	22.00
Horticulture Station (Ames, Iowa)						
Type	Cultivar	Number of plants	Total number of fruit	Total weight (lb)	Weight per plant	Number of fruit per plant
Scallop	Flying Saucer	3	37	25.62	8.54	12.33
	Peter Pan	3	31	22.01	7.34	10.33
	Sunburst	3	118	75.08	25.03	39.33
Yellow	Papaya Pear	3	93	50.02	16.67	31.00
	Seabring	3	35	15.16	5.05	11.67
	Supersett	3	71	36.25	12.08	23.67
	Zephyr	3	102	74.68	24.89	34.00
Zucchini	Costata	3	25	25.16	8.39	8.33
	Romanesco					
	Eight Ball	3	53	36.89	12.30	17.67
	Elite	3	73	49.26	16.42	24.33
Cousa	Raven	3	92	58.99	19.66	30.67
	Magda	3	33	29.48	9.83	11.00