

2003 Home Demonstration Gardens

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Introduction

To commemorate 100 years of ISU Extension, an heirloom garden was one of the themes for the Home Demonstration Gardens at seven ISU Research Farms in 2003. Heirloom vegetables and flowers were grown for display at each farm. Other themes included annual vines, bush beans, seedless watermelon, groundcover petunias, and vegetable “superstars” for health. Over 700 people attended the field days associated with the 2003 Home Demonstration Gardens.

Methods and Materials

Seeds for most plants were germinated at the ISU Horticulture greenhouses in Ames and transplanted by the end of May at each participating farm. Bush beans, corn, beets, radishes, and asparagus peas were directly seeded into the soil at each garden. Plants were watered at planting and as needed throughout the growing season. Limited fertilizer and pesticides were used.

Data were collected for bush beans and seedless watermelon cultivars. For bush beans, pencil thick pods were harvested and weighed (grams) approximately twice per week while plants were productive. Sixteen cultivars of bush beans were grown at each farm. For seedless watermelon, number of fruit and weight (pounds) were recorded at harvest for each cultivar. Eight cultivars of seedless watermelon were grown at each farm.

Results and Discussion

Bush Beans. The top five producers were Ambra, Tema, Festina, Sunburst, and Heavyweight. Dusky and Bronco also had good showings at several farms (Table 1). At all farms Ambra was the most productive cultivar and consistently produced pods for several weeks. At all farms, Goldito was one of the least productive cultivars. Burpees Stringless, an heirloom cultivar, had the most irregular pods whereas many of the rest of the cultivars tested produced uniform, straight pods. Many of those who harvested beans noted that the yellow cultivars were easy to harvest because the pods were highly visible. By growing both early- and late-producing cultivars, the harvest period was greatly extended.

Seedless Watermelon. Summer Sweet 5244 typically produced the largest watermelons whereas USS 2242 typically produced the smallest watermelons (Table 2). Everglade produced the most watermelons and Summer Sweet 3521Y produced the least. Attendees at field days thoroughly enjoyed all cultivars that were grown.

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Table 1. Mean total weights and descriptions of sixteen bush bean cultivars produced during the 2003 growing season at five research farms in Iowa.

Cultivar	Mean weight (grams)	Description
Ambra	4491.8 a	Early producer; straight pods
Blue Lake 274	2993.4 efghi	Late producer; standard cultivar
Bronco	3360.2 cdef	Early producer
Burpee Stringless	2662.0 fghij	Old-fashioned cultivar; large pods
Derby	2819.6 efghi	Late producer
Dusky	3402.4 cdef	Straight pods
Espada	2454.4 ghij	Late producer; slender pods
Fastina	3990.0 abc	Late producer; Blue Lake type
Goldenrod	3230.0 cedfg	Yellow wax bean
Goldito	2142.0 j	Yellow wax bean
Heavyweight	3470.8 bcde	Large pods
Rocdor	3078.6 defgh	Yellow pods
Savannah	2301.2 ij	Small straight pods
Sunburst	3841.6 abcd	Yellow wax bean
Tema	4247.0 ab	Straight, round pods
Top Crop	2432.2 hij	Straight pods

Means with the same letter are not significantly different.

Table 2. Weight and number of fruit produced for eight cultivars of seedless watermelon grown during 2003 in Iowa.

Cultivar	Number of fruit	Total weight (pounds)	Average fruit weight
Everglade	14	253	18.0
Orange Sun	7	155	22.1
Orange Sweet	6	100.2	16.7
Summer Sweet 5244	7	179.3	25.6
Summer Sweet 3521Y	4	42.7	10.6
Summer Sweet 5544	10	205.8	20.5
Trillion	8	167.6	20.9
USS 2242	6	58.8	9.8