

2018 Home Demonstration Garden

RFR-A1831

Cynthia Haynes, associate professor
Department of Horticulture

Introduction

There were two themes for the 2018 Home Demonstration Gardens—a rainbow pantry garden and bee-friendly flowers. Three-quarters of the garden was planted for the pantry garden, which focused on cultivar trials and donation of produce to local food pantries. The other quarter of the garden was planted with annual flowers pollinated primarily by bees or new flower cultivars.

Materials and Methods

Seeds of many vegetable and annual flowers were sown in late February and March 2018 at the Iowa State University Department of Horticulture greenhouses in Ames, Iowa. Seedlings were transplanted into cell packs approximately one month later. Cool-season crops were distributed to the farms in mid-April. In early May, warm-season plants were distributed to the farms. Multiple species (beans, cucumbers, summer squash, onions, potatoes, and carrots) were directly seeded or planted into the gardens.

Each farm acclimated transplants for approximately one week prior to planting. The ISU Research and Demonstration Farms in Iowa participating in the 2018 Home Demonstration Garden trial and display included: Armstrong (Lewis), Horticulture Research Station (Ames), the Lyon County Fairgrounds—Northwest (Rock Rapids), Muscatine Island (Fruitland), Northern (Kanawha), Northeast (Nashua), and Monona County Fairgrounds—Western (Onawa). All transplants and seeds were watered at planting

and as needed throughout the growing season. Fertilizer and pesticides were applied based on growing conditions at each garden.

Pantry garden. Fifteen vegetable species were chosen for the pantry garden. Cultivars were selected to display a wide variety of colors of produce. Vegetable cultivars grown are presented in Table 1.

Bee-friendly garden. Several flower species and cultivars were selected based on their ability to attract bees. The quadrant included several cultivars of agastache, ageratum, bee's friend, borage, Chinese forget-me-not, cleome, bee balm, mealycup sage, oregano, sunflowers, Mexican sunflower, and zinnias.

Results and Discussion

Over 8,700 lb of fresh produce was donated to local food pantries. Total marketable pounds from all gardens for each cultivar is presented in Table 1. Several cultivars outperformed others at each farm. For example, Kennebec and Purple Majesty were the top performing potato cultivars at most farms. Sweet Slice was more productive than Diva cucumber as was Blue Vantage cabbage compared with Red Kalibos. However, the comparison of total marketable yields (lb) of dissimilar cultivars is not always an accurate depiction of production. For example, three pepper cultivars are of distinctly different types (bell, snacking, and hot) and vary in size and weight.

Acknowledgements

Thanks to the farm superintendents, staff, and Master Gardeners at each research farm for planting, harvesting, collecting data, donating produce, and hosting a field day.

Table 1. Total marketable weight (lb) of produce harvested from seven ISU Research and Demonstration Farms across Iowa in 2018.

Vegetable	Cultivar	Total marketable produce (lb)
Beans	Amethyst	81.05
	Golden Rod	129.85
	Provider	123.45
Broccoli	Aspabroc	96.87
	Luna	109.40
Cabbage	Blue Vantage	285.25
	Red Kalibos	87.59
Cauliflower	DePurple	37.36
	Flame Star	48.20
Cucumber	Diva	476.98
	Sweet Slice	744.73
Eggplant	Pingtung Long	133.86
	Shikou	142.20
Kale	Prizm	136.49
Onions	Forum	50.12
	Red Wethersfield	48.99
	Stuttgarter	69.52
Peppers	Cayenne Blend	36.08
	Declaration	130.88
	Lunch Box	100.73
Potato	Kennebec	71.68
	Mountain Rose	14.58
	Purple Majesty	67.40
	Yukon Gold	44.95
Summer Squash	Caveli	979.56
Sweet Potato	Beauregard	179.12
	Golden Glory	861.26
	Green Machine	969.91
Tomatoes	Chef's Choice Orange	237.60
	Chef's Choice Pink	93.60
	Chef's Choice Red	189.68
	Chef's Choice Yellow	112.10
	Mountain Merit	303.75
	Red Deuce	346.00
Watermelon	Sugar Baby	801.08
Winter Squash	Butterscotch	358.06