

# Strawberry Demonstration

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recommended in “Growing Strawberries at Home” (Pm 717 from ISU Extension).

## Introduction

Strawberries are one of the most popular fruits to grow in the home garden. In recent years, several new cultivars of strawberries are being marketed to home gardeners. In 2006, some of these cultivars of strawberries were planted at ISU Research Farms across the state. The objective was to grow and compare a few of the new strawberry cultivars to well-known cultivars. In addition, these cultivars would be on display at the Home Demonstration Garden Field Days for attendees to see and taste.

## Materials and Methods

Plants arrived from Nourse farms in mid-April 2006 and were distributed to the farms by late April. Plants were planted at most farms by mid-May. Approximately 8–10 plants of each cultivar were planted. Each cultivar was planted in 15 ft of row with 1.5 ft between plants and 5 ft between rows. 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. For the first season, all flowers were removed to allow plants to establish. The first winter, plants were covered with several inches of straw to ensure overwinter survival. Straw was removed in the spring. In 2007, plants flowered and yield was recorded. Total weight, total number of berries, and average size per berry were recorded. Observational data on growth habit and taste of berries is also noted in this report. After all fruit were harvested, plantings were renovated and fertilized as

## Results and Discussion

A comparison of total yield, berry number, and average berry size is available in Table 1. All strawberry cultivars were productive their first year in this two-year trial. The top performers, based on total yield, were Itasca, Jewel, and Sparkle at Armstrong and Northeast; Jewel, Itasca, and Allstar at Muscatine; and Itasca, Honeoye, and Cavendish at Northern. Cabot generally had the largest berry at each farm while Sparkle generally had the smallest.

Based on observations, all plants established quickly. Even after renovation, all cultivars formed new plants and filled their rows. At most farms Sparkle was the first to form new plants to fill the row. Cabot and Clancy were generally the last to fill their rows, but by the end of the season all cultivars were well established.

While taste is a subjective quality, field day attendees selected Sparkle most often as the best tasting strawberry. It is important to note that no cultivar was rated as poor tasting by field day attendees. Staff at the Muscatine Research farm reported that Jewel, Allstar, Sparkle, and Ovation retained a good to excellent firmness and flavor even after heavy rains in comparison with the other cultivars.

## Acknowledgements

The researchers and farm superintendents would like to thank Nourse Farms for the generous donation of strawberry plants.

**Table 1. Comparison of total yield, berry number, and average berry size of 10 strawberry cultivars grown at four ISU Research Farms in Iowa.**

Cultivar	Location			
	Armstrong	Muscatine	Northeast	Northern
<b>Allstar</b>				
Total grams	7,853	2,508	9,916	5,061
Berry no.	---	286	1,175	854
Avg. berry, g	10.1	8.64	8.44	5.93
<b>Cabot</b>				
Total grams	6,663	1,836	7,122	5,925
Berry no.	---	133	440	452
Avg. berry, g	13.9	14.35	16.12	13.1
<b>Cavendish*</b>				
Total grams	---	799	---	15,366
Berry no.	---	74	---	1,733
Avg. berry, g	---	9.52	---	8.87
<b>Clancy</b>				
Total grams	6,266	1,652	8,083	9,228
Berry no.	--	173	808	1,074
Avg. berry, g	10.9	9.39	10.0	8.59
<b>Honeoye*</b>				
Total grams	---	80	---	1,2304
Berry no.	---	12	---	2,004
Avg. berry, g	---	7.77	---	6.13
<b>Itasca</b>				
Total grams	9,356	1,873	20,838	14,203
Berry no.	---	235	2,295	2,262
Avg. berry, g	10.0	7.87	9.08	6.28
<b>Jewel</b>				
Total grams	9,016	2,743	13,227	9,781
Berry no.	---	280	1,588	1,507
Avg. berry, g	10.3	9.98	8.34	6.49
<b>L'Amour</b>				
Total grams	6,918	1,690	9,345	7,300
Berry no.	---	254	827	887
Avg. berry, g	10.9	6.70	11.31	8.23
<b>Sparkle</b>				
Total grams	9,186	1,691	19,446	11,425
Berry no.	---	189	3,300	2,870
Avg. berry, g	7.7	8.78	5.89	3.98
<b>Ovation</b>				
Total grams	5,132	1,337	4,509	5,868
Berry no.	---	132	464	663
Avg. berry, g	11.3	12.57	9.73	8.85

\*Cavendish and Honeoye only planted at Muscatine and Northern Research Farms.