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Strawberry Cultivar Performance in 2005

Abstract

This project was designed to evaluate eighteen strawberry cultivars for their adaptation and fruit quality in Iowa. Cultivar selection is an important component of successful strawberry production, and commercial growers and homeowners need local information about the characteristics of new cultivars and recently released germplasm.

Keywords

Horticulture

Disciplines

Agricultural Science | Agriculture | Horticulture

Strawberry Cultivar Performance in 2005

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Introduction

This project was designed to evaluate eighteen strawberry cultivars for their adaptation and fruit quality in Iowa. Cultivar selection is an important component of successful strawberry production, and commercial growers and homeowners need local information about the characteristics of new cultivars and recently released germplasm.

Materials and Methods

2004. The strawberry planting was established on May 10, and a good stand of plants for a filled matted row was achieved for each cultivar. Plots were established with fifteen plants set 18 in. apart within the row; rows were planted 4 ft apart. Runner plants were allowed to develop a 2-ft-wide matted row. Plants were mulched with 4 in. of straw for winter protection in December. The experimental design was a randomized complete block with three replications.

2005. The mulch was removed on April 5, 2005. Early, warm spring temperatures were conducive to early strawberry plant growth. On this date, plants were fertilized with nitrogen (N) (34-0-0) to provide sufficient N for plant growth and development when grown on a coarse sandy soil. Spring freezes occurred on May 2 (28°F), May 3 (23.7°F), and May 4 (27°F). Overhead irrigation for frost protection was not available, and many primary flowers were killed. Plants were harvested June 13–27, and the planting was renovated using conventional practices on June 30.

Results and Discussion

Early-season fruiting cultivars, such as Northeastern, had low total yields due to spring freeze damage (Table 1). Total yield and berry weight data presented show the potential yield that may be obtained after spring-freeze damage. These data should be considered preliminary since it is only the first year of fruiting and low temperatures injured the flowers. The trial will be continued in 2006.

Acknowledgments

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Table 1. Strawberry cultivar total yield, berry weight, and general observations for the 2005 growing season.

	Yield	Berry weigl	nt
Cultivar	(lb/acre) ^z	(g)	Observations
Canoga	8464	8.53	large dark red berries, firm texture, acceptable flavor
88.74.1	7511	21.84	large, irregularly shaped berries
St. Pierre	7416	9.33	nice shape, firm berries, red to light red color
Cavendish	7366	11.67	dark red with some white streaks, firm, good shape, mediocre flavor
Darselect	7033	9.98	dark red, somewhat bland but occasionally tart flavor
Eros	6992	11.12	nice firm shape, light red color
Seneca	6942	12.11	nice red color, occasional irregular shape, very firm berries
91.80.2	6890	9.88	acceptable shape, prominent, rough seeds, firm, tart flavor
Ovation	6484	10.57	firm, red, good flavor
Jewel	6212	9.06	nice appearance and shape, uniform red color
Allstar	5726	6.91	light red color, common rough shapes, excellent flavor
Cabot	4955	11.83	large red berries, fairly firm berries, good flavor
Evangeline	3924	6.74	small berries, nice appearance, medium firm texture
Honeoye	3208	6.41	rather small, dark red berries, medium firm, tart flavor
Brunswick	3086	8.21	soft, dark red berries
Clancy	2262	6.93	dark red, firm, small berries
E9.A5.13	1917	6.09	small berries had nice shape, uniform color but rather soft
Northeastern	270	6.13	few berries

^zThe means of three replications.