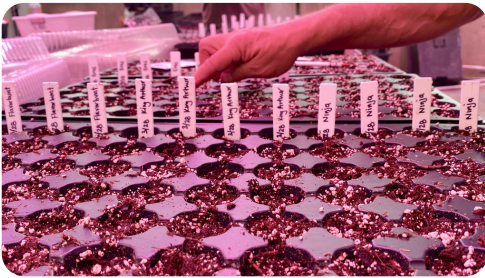




# Larimer County Master Gardener Sweet Pepper Trials

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## The Purpose of the Study

There has been an explosion of interest in backyard production of fresh vegetables around the country. Sweet peppers are a favorite to grow on the Colorado Front Range, though selection of varieties is challenged by the relatively short growing and harvest season. Members of the Colorado State University Extension Master Gardener program in Larimer County, in cooperation with the CSU Specialty Crops program, conducted a trial with 15 sweet pepper varieties.

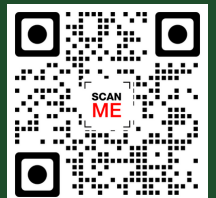
## Materials & Methods

Hybrid and open-pollinated pepper varieties known to be early to early mid-season in maturity were selected. Twelve varieties were sweet bell peppers and three were “lunchbox” type. Peppers were grown in the greenhouse and transplanted on June 8, 2022 at the CSU ARDEC-South (Fort Collins, Colo.) research farm. The plants were planted into ground beds covered with black plastic and irrigated with drip irrigation. It was a replicated and randomized trial.

Three plants from each replication were harvested with the weight and number of fruits recorded. Harvesting began when fruit began to show a blush of color. There were three harvests during the growing season – the final harvest removed all fruit from plants. Heat and rabbit damage affected the pepper plants, so theoretical yields were used for each variety. Sixteen participants took part in a pepper taste test whereby varieties were scored 1 (worst) to 5 (best) for fruit sweetness, texture, and overall flavor.

## Fast Facts

- Sweet peppers are a favorite of backyard gardeners, but the Colorado Front Range short growing season limits varieties that can be grown successfully.
- There were 15 pepper varieties in the research trial.
- Peppers were evaluated for flavor and yield.





## Results & Comments

The variety 'Purple Beauty' was the earliest variety, though taste was lacking (it scored the lowest by tasting participants). Both 'Olympus' and 'Ace' had yielded the greatest number of fruits. For those wanting to grow a stuffing pepper, 'Olympus' had the greatest percentage of 4-lobed fruit. The largest fruit size was 'King Arthur', which yielded fruits averaging one-half pound each. Of the “lunchbox” varieties, 'Just Sweet' stood out by its high yield, great flavor, and larger fruit size. Though 'Cajun Belle' is sold as a sweet pepper, it does have a spicy heat. All pepper plants were less than 24" tall and 24" wide. Overall, these trial results offer the home gardener valuable information to help determine what varieties to grow in northern Colorado.

Variety	Maturity	Average fruit yield per plant (pounds)	Average number of fruit per plant	Average Fruit Size (ounces)	Overall Flavor
<b>Ace</b>	2	6.1	26.4	3.7	3.1
<b>Flavorburst</b>	2	5.2	14.2	5.9	3.2
<b>Golden Star</b>	3	4.5	12.0	6.1	3.2
<b>Gourmet</b>	2	3.9	15.0	4.3	
<b>King Arthur</b>	3	4.7	8.6	8.6	3.5
<b>Milena</b>	2	4.5	13.0	5.4	
<b>Ninja</b>	3	3.5	11.5	5.4	3.2
<b>Olympus</b>	2	6.1	16.0	6.2	3.3
<b>Purple Beauty</b>	1	4.2	21.0	3.3	2.4
<b>Sprinter</b>	3	5.5	5.5	4.9	3.4
<b>Staddon's Select</b>	3	5.7	5.7	3.6	
<b>Sweet Sunrise</b>	3	4.3	4.3	4.4	3.2
<b>Lunchbox Varieties</b>					
<b>Cajun Belle</b>	2	2.8	74.0	0.6	
<b>Eros</b>	2	3.1	64.0	0.8	2.8
<b>Just Sweet</b>	2	5.0	67.0	1.2	4.3

### Table details:

- Maturity: 1 = earliest to mature; 3 = latest to mature
- Flavor scale: 1 = lacking flavor; 5 = great flavor
- Omitted from tasting: Gourmet, Milena, Staddon's Select & Cajun Belle

### Thanks to the following:

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