2019 LARIMER COUNTY MASTER GARDENER TOMATO TRIAL

Jon Weiss, Larimer County Master Gardener Alison O'Connor, PhD, horticulture agent



Purpose of the study:

Tomatoes are one of the most popular garden vegetables. One question often asked is "what tomato varieties do best in northern Colorado?" To answer this question, members of the CSU Extension Master Gardener program in Larimer County, in cooperation with the CSU Specialty Crops program conducted a trial with 12 tomato varieties.

Materials and Methods:

Hybrid and open pollinated tomato varieties were included, along with determinate (bush) and indeterminate growth habits. Tomatoes were grown in the greenhouse and transplanted on June 5, 2019 at the CSU ARDEC-South research farm.

Data Collection:

Yield and average fruit size were collected for each variety. A taste-test was conducted for overall fruit quality, sweetness, and texture.

2019 Tomato Varieties

Determinate:

- Celebrity
- Mountain Fresh Plus
- Mountain Merit
- Polbig
- Valley Girl

Indeterminate:

- Big Beef
- Carbon
- Chef's Choice Black
- Early Girl
- Mountain Rouge
- Moskvich
- New Girl





2019 Tomato Trial Results

Three plants from each replication were harvested and the weight and number of fruit recorded. Fruit were harvested weekly beginning September 3, 2019 and ending on October 7, 2019. Thirteen participants took part in a tomato taste-test whereby varieties were scored 1 (worst) to 5 (best) for fruit sweetness, texture, and overall flavor.

Variety***	Total Yield (lbs.)	Average Fruit Size (oz.)	Overall Flavor	Texture	Sweetness
New Girl *	82.88	2.3	3.2	3.6	2.8
Big Beef	76.77	4.55	2.7	2.8	2.2
Carbon	61.39	5.92	2.7	2.6	2.9
Celebrity	53.04	4.59	3.1	3.4	2.3
Early Girl	52.75	2.26	2.5	3	2.2
Polbig	45.08	3.68	2.9	3.5	2.6
Chef's Choice Black	42.02	4.37	3.2	2.7	3.2
Valley Girl	40.89	2.49	2	2	2.1
Mtn. Fresh Plus	37.16	4.91	**	**	**
Mtn. Merit	22.73	4.66	2.2	2.9	2.2
Mtn. Rouge	18.74	3.4	2.7	3.2	2.8
Moskvich	17.31	1.58	2.8	2.8	2.7

^{*}Earliest maturing variety

Results and Comments:

New Girl had the largest yield of all the varieties with 82.88 pounds, ranked highest for fruit texture, and was one of top two for overall fruit flavor. Chef's Choice Black ranked highest for sweetness and overall flavor. Carbon had the largest fruit size with 5.92 ounces. Overall, the trial results offer the home gardener valuable information to help determine what varieties to grow in Northern Colorado.



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^{**}No fruit for evaluation

^{***}Carbon & Moskvich open pollinated - balance hybrids