

2008 Eggplant Variety Trial in Central Missouri

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This paper reports the preliminary evaluation of eggplant varieties in 2008 in Central Missouri.

Materials and Methods

Seedlings of twenty eggplant varieties from different seed sources were planted on the Lincoln University Carver Farm located at Jefferson City, Missouri. The soil type is Elk silt loam with 1.1% organic matter and a pH of 6.1. Seeds were sown in a greenhouse from April 8 to 10 (with some exceptions shown in Table 1). All transplants were placed outside the greenhouse after May 25, as the excess spring rainfall delayed field planting. Transplants were planted in the week of June 16 and spaced out 5 feet x 2 feet in the field and trickle-irrigated under black plastic mulch as needed. Fertigation was done three times with 20N-20P-20K fertilizer at the rate of 200 ppm N in early June, August, and September. Transplants were treated with Marathon II before planting but no pesticides were applied in the field because of the low pest incidence. This variety trial was a Rapid Action Cultivar Evaluation (RACE), with 12 individual plants/cultivar planted in a single plot (row). Data from eight plants in the middle of the row of each cultivar were collected until October 15, 2008. Harvesting was done every Monday and Thursday. Three fruit per variety were randomly chosen in late September for observation or measurements of fruit color, weight, length, and diameter.

Results and Discussion

All varieties performed well in the field although it has been an abnormally wet year in Central Missouri. Consequently, there was not much need for supplemental irrigation. Disease incidence was minor. Insect damage was limited although flea beetles became a problem in late fall.

Among the 20 varieties, Mangan, Italian Galine, Calliope, Clara, Orient Charm, and White Tango produced early; while Black Beauty, Green Raveena, Nadia, and Chinese Long (Table 1) reached marketable size late. The maturity of Lavender Touch and Twinkle could not be determined because of late seeding.

Yield was high with Classic, Twinkle, Lavender Touch, Clara, Black Beauty, and White Tango (Table 2). Most of these varieties have a length:diameter ratio less than 2.5. The Asian type eggplant winners were Machiaw and Orient Charm. Both have long and light purple fruit. Most varieties have single fruit except Green Raveena, Orient Charm, Machiaw, and Fairy Tale.

Conclusion

Based on field observation and the information from Tables 1 and 2, the following 12 cultivars will be formally tested in 2009: Classic, Twinkle, Lavender Touch, Clara, Black Beauty, White Tango, Beatrice, Machiaw, Orient Charm, Mangan, Snowy, and Italian Galine.

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Table 1. Seed source and Chronological data of 2008 eggplant variety trial in central Missouri.

Cultivar	Seed Source^z	Seeding	Flowering	Fruit Set	First Harvest
Mangan	JS	4/8	6/30	7/7	7/10
Italian Galine	JS	4/10	6/30	7/7	7/14
Calliope	JS	4/8	6/30	7/7	7/17
Clara	JS	4/8	6/30	7/10	7/17
Orient Charm	JS	4/8	6/30	7/10	7/17
White Tango	JS	4/8	7/7	7/10	7/17
Machiaw	JS	4/8	7/7	7/14	7/21
Classic	MCS	4/10	7/7	7/14	7/24
Dancer	JS	4/8	7/10	7/17	7/24
Fairy Tale	PK	5/23	7/7	7/10	7/24
Beatrice	JS	4/8	7/7	7/10	7/28
Florida Market	MCS	4/10	7/17	7/21	7/28
Rosa Blanca	JS	4/8	7/10	7/14	7/28
Snowy	JS	4/9	7/7	7/10	7/28
Black Beauty	MCS	4/10	7/14	7/17	7/31
Green Raveena	JS	4/8	7/10	7/21	7/31
Nadia	JS	4/9	7/14	7/21	7/31
Chinese Long	MCS	5/2	7/17	7/21	8/4
Lavender Touch	PK	5/23	7/21	7/28	8/7
Twinkle	PK	5/23	7/14	7/21	8/11

^zJS:Johnny's Selected Seeds. Foss Hill Road, Albion, ME 04901. Phone: 877-564-6697.

MCS: Morgan County Seeds, 18761 Kelsay Rd. Barnett, MO 65011. Phone: 573-378-2655.

PK: Park Seed Company. 1 Parkton Ave., Greenwood, SC 29647.

Table 2. Yield and fruit characteristics of 20 eggplant Varieties tested in Central Missouri.

Cultivar	Yield	No. of Fruit	Fruit characteristic				
	g/plant	per plant	Color	Weight (g)	Length (cm)	Diameter (cm)	Length /Diameter
Rosa Blanca	1362.0	49	Purple/white	397.3	10.8	9.4	1.2
Chinese long	2341.0	11	Purple	221.3	25.8	5.1	5.1
Green Raveena	2644.3	229	Light green	107.3	27.2	3.0	9.0
Nadia	2674.0	82	Dark purple	486.0	20.2	8.4	2.4
Florida Market	2814.3	70	Purple	366.0	14.8	9.0	1.6
Calliope	2845.9	119	Purple/white stripe	266.0	12.7	7.6	1.7
Italian Galine	2985.6	92	Purple	468.0	16.7	9.4	1.8
Mangan	3000.7	128	Dark purple	206.7	17.2	6.4	2.7
Snowy	3110.7	169	White	199.3	18.3	5.3	3.5
Orient Charm	3165.5	212	Light purple	200.0	29.0	4.1	7.1
Fairy Tale	3291.0	539	Purple/white stripe	96.5	15.3	9.7	1.6
Dancer	3308.5	151	Purple	324.0	20.2	6.7	3.0
Machiaw	3611.6	299	Light purple	194.7	35.3	3.8	9.2
Beatrice	3878.9	92	Light purple	367.3	13.0	9.2	1.4
White Tango	4093.7	195	White	191.3	19.3	5.1	3.8
Black Beauty	4152.6	74	Dark purple	359.3	15.8	9.3	1.7
Clara	4298.7	105	White	346.0	15.3	8.0	1.9
Lavender Touch	4332.1	288	Light purple	260.0	18.3	6.4	2.9
Twinkle	5654.8	146	Purple/white stripe	292.7	11.5	8.7	1.3
Classic	5830.6	131	Dark purple	428.0	20.7	7.7	2.7