

Broccoli Cultivar Trial

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The broccoli trial had two planting dates - April 28 for summer harvest and again on July 20 for a late fall harvest. Yield data did not differ significantly between plantings so were combined for presentation in Table 2. However, some differences in head quality were noted between summer and fall harvest with a few cultivars producing a more marketable, better quality head in the fall (see comments in Table 1). Best in trial: *Packman* and *Regal* were good early-maturing cultivars producing marketable heads in about 52 days from transplanting. *Nomad* and *Windsor* consistently produced heads that had short tight branching supporting smooth domes consisting of small beads with nice bluish-green color. *Arcadia* produced good quality heads in the fall but July harvest records indicated some heads were a little loose and rough shaped. *Violet Queen* is a novelty purple cauliflower that produced an interesting purple colored head on a tall bushy plant.

Table 1. Cultivar comments and descriptions.

Cultivar	Head Shape	Head Firmness	Bead Size	Comments
Arcadia	dome	tight	small	looked good in fall, fair quality summer harvest
Emperor	semi-dome	fair	medium	heads became loose & rough quickly in July
Eureka	dome	fair	small	heads became loose quickly, best quality in fall
Everest	semi-dome	tight	small	some leafiness in heads
Fiesta	semi-dome	tight	small	short plant with thick stem, slow head development
Goliath	semi-dome	fair	medium	loose heads with long branching if not cut early
Nomad	dome	tight	small	nice looking, compact, blue-green heads
Packman	semi-dome	fair	medium	good early cultivar
Paragon	flat	loose	med large	heads became tall & loose quickly
Pinnacle	dome	fair	med small	best in fall, light blue-green heads a little rough
Premium Crop	semi-dome	fair	medium	tall heads had rough, lumpy shape
Regal	dome	fair	med small	early harvest, nice looking green heads
Sultan	dome	fair	small	bushy plant, some leafiness in heads & rough shaped
Triathlon	dome	tight	small	bushy plant, thick stem, heads light yellow-green
Windsor	dome	tight	small	nice smooth heads with dark blue-green color
Burgundy Queen	dome	loose	small	purple-colored cauliflower, loose leafy heads
Violet Queen	dome	tight	small	purple-colored cauliflower, attractive heads

Materials and Methods - Broccoli

Planting: First planting in greenhouse 3/28 using 72 cell-packs, transplanted to field 4/28.
Second planting 6/23, transplanted to field 7/20.

Plot Design: Randomized Complete Block, two replications each planting date. Plot = one row of twelve plants spaced 12' apart, rows 42" apart.

Soil Type: Alluvial coarse sand, O.M. content 1.5% or less, CEC of 2.5-5 meq/100g.

Irrigation: Overhead sprinklers, water applied according to tensiometer readings.

Fertility: 50 lbs P₂O₅ and 200 lbs K₂O applied preplant incorporated. Nitrogen applied by split application - 50 lbs preplant and 80 lbs sidedressed when plants 6" tall.

Pesticides: Prefar herbicide, Capture insecticide, Bravo fungicide.

Table 2. Broccoli cultivar yield data summary.

Cultivar	Seed Source	DTH	Plant Height	Head Weight	Head Diameter	Stem Diameter
			<i>inch</i>	<i>lbs</i>	<i>inch</i>	<i>inch</i>
Arcadia	ST	66	16	.78	4.5	1.4
Emperor	ST	58	15	.97	5.7	1.5
Eureka	ST	68	17	.85	4.7	1.5
Everest	NV	54	14	1.00	5.8	1.5
Fiesta*	SW	65	14	.99	4.5	1.7
Goliath	ST	51	16	.72	5.1	1.3
Nomad	SA	58	14	.94	5.3	1.5
Packman	ST	51	13	.78	5.6	1.5
Paragon	ST	52	17	.70	5.8	1.4
Pinnacle	SW	68	17	.88	5.0	1.4
Premium Crop	ST	56	14	.86	5.6	1.7
Regal	HM	51	14	.78	5.8	1.5
Sultan	SW	58	14	.79	4.9	1.4
Triathlon*	ST	67	15	.99	4.9	1.8
Windsor	NV	56	15	.87	5.1	1.5
Burgundy Queen	ST	72	16	1.3	5.9	1.5
Violet Queen	SW	70	16	1.1	5.1	1.4
<i>Trial Average</i>				.90	5.3	1.5
<i>LSD 5%</i>				.24	.8	.1

* No fall harvest because of slow head development.
Plant Height = base of plant to top of head at harvest.
Head Weight = 6" to 8" long trimmed head.