

FRESH MARKET BROCCOLI VARIETIES FOR THE WILLAMETTE VALLEY

Consumer demand for broccoli has grown dramatically over the last 10 years. With most commercially available broccoli cultivars being bred for production in the mild climates of California, Willamette Valley farmers need to find varieties suitable for the local climatic conditions. Oregon's hot summers and unpredictable high temperatures can reduce broccoli head quality significantly, especially in late summer to early fall when the crop matures.

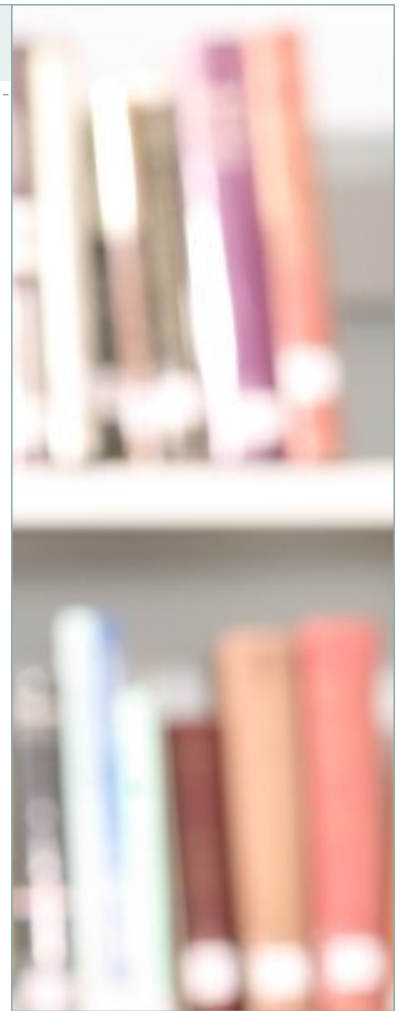
Broccoli heat tolerance trials were conducted at the OSU vegetable research farm in Corvallis in 2019 and 2020. Although these trials were initially focused on finding varieties suited for processing, several hybrids were found to have suitability for fresh market growers as well. This newsletter describes several heat tolerant and easy to grow varieties suitable for fresh market production.

Identifying high performing varieties for our regional climate can be challenging, as weather fluctuates from year to year. Our strategy for examining the climatic suitability of a broccoli was to trial varieties over several seasons with multiple planting dates throughout the growing season. A cultivar would be considered climatically adaptable when it is able to grow and perform well across a wide spectrum of growing temperatures.

Heads were evaluated at harvest for the most commonly expressed symptoms of heat stress: irregularities in color, bead size and head uniformity, as well as head firmness. Head weight and total and usable floret yield were also measured.



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Recommended Hybrids:

Asteroid

Castle Dome

Eastern Crown

Eiffel

Lieutenant

Monflor

RECOMMENDED FRESH MARKET VARIETIES FOR THE WILLAMETTE VALLEY

“In addition to its ability to prevent disease, broccoli is packed with nutrients and antioxidants that support many aspects of human health”



Asteroid bred by Harris Moran

Purplish green hue suited for crown cut, bunching and florets with a smooth dome and medium-small beads. Very good consistency and heat tolerance suitable for many planting dates. Good maturation uniformity. Approximately 88 days from seed to harvest.

Castle Dome bred by Seminis

Consistent and very heat tolerant variety with light green dome shaped heads. Matures uniformly in the field and has good holding abilities. Mainly used for cut crowns but florets well too. Very early maturing in approximately 80 days from seed to harvest.



Eastern Crown bred by Sakata

One of the most consistent broccoli hybrids. Heavy yielding with large dome shaped heads and fine medium-small beads. Very good heat tolerance and suitable for several planting dates. Very compact plants, often with heads only 12 inches off the ground. Approximately 90 days from seed to harvest.



Eiffel bred by Seminis

Known for being a “high rise” type broccoli, it forms very exserted heads which protrude well above the canopy. Heads can grow to be extremely large if given extra space to grow. Bead size and color consistency can sometimes be a problem with this hybrid but overall a good broccoli for the region. Approximately 94 days from seed to harvest.

Lieutenant bred by Seminis

One of the most classic looking of the broccoli hybrids we have evaluated at the research farm, it’s form makes it well suited for the fresh market. Very consistent and easy to grow hybrid that has been around for many years. Approximately 85 days from seed to harvest.



Monflor bred by Syngenta

A specially bred, exserted broccoli type with a flat and loose head allowing for easy harvesting of florets on very long stems. Very early to mature, with a uniform maturation of harvest in the field. Especially suited for bunching. Approximately 78 days from seed to harvest.

