Seeded Watermelon Cultivar Trials for Southwestern Indiana, 2003

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Indiana remains a major watermelon producer for the Midwest. With the proliferation of new varieties, the increased competition and the need to maximize profitability/unit area, the identification of new varieties that are of high quality, high yielding and disease resistant as well as meet market expectations, is of importance to commercial growers. This trial, along with the seedless watermelon variety trial provides an objective and independent comparative assessment of new watermelons for the commercial industry. This year's study included 25 seeded watermelons, with 13 named varieties, and 12 experimental line.

Methods:

Twenty five seeded melon cultivars were evaluated in a randomized complete block design with three replications. Each entry was first direct seeded in the greenhouse on April 17, 2003 and transplanted into the field on May 14, 2003. Plots consisted of 55-foot long single rows, covered with 4 ft. black plastic mulch, with rows centered eight feet apart, 11 plants per row and 5 feet between plants. Each trial was grown in accordance with the recommendations outlined in the Midwest Vegetable Production Guide for Commercial Growers (ID-56, 2002). Trickle irrigation lines placed beneath the plastic mulch provided water as needed. Fruits were harvested from August 5 through August 18. Data was analyzed with the Statistical Analysis Software (SAS) package (SAS Institute, Cary, NC).

Results:

Yields and Quality. Yields ranged from 19.8 to 27.1 tons/acre with 1667 to 2398 fruit/acre harvested across all the entries (Table 1). Yields were generally higher in this years trial, compared to the 2002 trial. The average fruit weight was 24.4 lbs/fruit, with a range of 21.3 to 27.8 lbs/fruit. Highest yielding cultivars were; Patriot, Celebration, Mardi Gras, WX 266, and Raspa. Most of the fruit in this trial was oblong in shape with medium or thick rinds. RoJo Grande, Ole, RWM 8150, WX 257, WX 261, and WX 262 had cracked hearts in at least one of the samples evaluated. One instance of rind necrosis was observed on Carson. The best tasting melons in the trial were: WX 266, SF 420, HSR 3024, and Campadre, which also had the highest percent soluble solids. Seeded watermelon selection should be in large part based upon the size, shape and class of fruit to which your market is focused.