

**Project Title:** Processing Pea Cultivar Evaluation - 2004

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**Objectives:**

1. Identify pea cultivars with agronomic characteristics suitable for the processing industry.

**Methodology:**

Pea cultivars were seeded on a Brookston clay loam sand spot phase soil at the Ridgetown College Research Farm on 06 May 2004. Based on soil nutrient analysis, additional phosphorous and potassium were not required, and no nitrogen was applied. No seed treatments were applied other than what was present when the seed came from the supplier. The peas were seeded at a rate of 1 375 000 plant/ha (500 000 plants/acre) into rows spaced at 18 cm (7") using a 12- row Wintersteiger double cone plot seeder. Seed numbers were calculated by weight, using data provided by seed companies

Weeds were controlled by a preplant application of Pursuit and hand hoeing.

Plots were monitored as they matured by harvesting a subsample of 0.5 m x 8 rows per plot, and combining the 4 samples (replicates) and shelling. Tenderometer readings were made using an F.M.C. pea tenderometer. At harvest, 2.0 m x 8 rows (2.88 m<sup>2</sup>) were harvested per plot, and shelled in a stationary pea sheller.

**Results:**

Thirty five cultivars from 6 seed companies were included in the trial. Of these, 28 were cultivars which were not in the trial in previous years. Spring, Encore and Citation were included as standards for comparison.

Plant stands were good due to adequate moisture in May, and overall the trails were good. Weed control was good. Tenderometer readings averaged 97.1 across all cultivars.

The top yielding early maturing varieties (less than 1400 heat units\*) were Sherwood (7461 lbs/acre\*), Twinkle (6807 lbs/acre\*), PLS 902 (6414 lbs/acre\*), and PLS 9 (5942 lbs/acre\*) The yield of Spring was 5564 lbs/acre\*.

The top yielding late maturing varieties (greater than 1400 heat units\*) were Geisha (9190 lbs/acre\*), Ashton (8705 lbs/acre\*), PLS 13523 (8471 lbs/acre\*) and Zodiac (8455 lbs/acre\*). The yield of Encore was 6904 lbs/acre\*.

\* - yields and heat units were adjusted to a tenderometer value of 100; one tenderometer point was equivalent to 28 lbs/acre and 2 heat units.