

Asparagus Cultivar Trial

RFR-A1570

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Introduction

As local food production has increased in Iowa, there is renewed interest in perennial vegetable crops such as asparagus. The purpose of this multi-year study is to compare the performance of modern male hybrid asparagus cultivars with popular older cultivars, under soil and environmental conditions at the ISU Northeast Research and Demonstration Farm.

Materials and Methods

The asparagus trial consists of five cultivars, including Martha Washington, Purple Passion,

and the male hybrids Jersey Supreme, Jersey Knight, and Jersey Giant. The trial was initially planted in May of 2009. Additional crowns to fill out the planting were planted in April 2010. There are four randomized replications of each cultivar with two rows of five plants in each rep. Rows are four ft apart and plants within rows are one ft apart.

Results and Discussion

All five cultivars increased yield and spear size in 2015 over 2014, and overall yield in the trial increased 28 percent from 2014. In 2014 and 2015, Purple Passion had the highest yield and the largest spear weight. Jersey Supreme had the greatest increase from 2014 to 2015 in weight (3,550 lb/acre) and the second highest yield, but had the smallest spear size.

Table 1. Asparagus cultivar yield for 2014-2015.

Cultivar	2014 yield lb/acre	2015 yield lb/acre	2014 average spear weight, gm	2015 avg. spear weight, gm
Purple Passion	8,260	11,004	25.4	29.5
Jersey Knight	7,160	10,260	23.4	26.6
Martha Washington	6,670	8,710	19.9	21.7
Jersey Supreme	6,720	10,270	17.6	20.9
Jersey Giant	4,440	5,950	20.6	26.3