

Asparagus Cultivar Trial

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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, Nashua, Iowa.

Materials and Methods

The asparagus trial consists of five cultivars, Martha Washington, Purple Passion, and the male hybrids Jersey Supreme, Jersey Knight,

and Jersey Giant. The trial was initially planted in May 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 feet apart and plants within rows are one foot apart.

Results and Discussion

It generally takes at least five years for an asparagus patch to become fully established. Therefore, the data in 2012-2013 may not be representative for potential yield in a mature planting. In both years, Purple Passion had the highest yield and the largest spear weight. Jersey Knight had the greatest increase from 2012 to 2013 in weight (1,739 lb/acre) and yield percentage (48%) while still having the second biggest spear size.

Table 1. Asparagus cultivar yield for 2012-2013.

Cultivar	2012 yield lb/acre	2013 yield lb/acre	2012 average spear weight (gm)	2013 average spear weight (gm)
Purple Passion	6,692	6,796	22.0	23.2
Jersey Supreme	4,964	6,186	15.8	16.2
Martha Wash.	3,896	5,148	14.8	16.6
Jersey Knight	3,632	5,371	20.4	19.8
Jersey Giant	2,774	3,485	16.1	17.4