

## All-America Selections Vegetable Trial

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A new project this year at the Muscatine Island Research Farm was the All-America Selections (AAS) Vegetable Trial. The AAS is an independent, non-profit organization established in 1932 by industry leaders to organize and oversee unbiased evaluations of new, soon to be released flower and vegetable varieties. The goal of the AAS is to identify extraordinary breeding breakthroughs in their trials and then promote these proven winners to the public with the AAS Winner designation.

There are several AAS vegetable trial sites across the country hosted by universities (such as the ISU Muscatine Island Research Farm), seed companies, and other public gardens or entities. AAS requires that all trial sites have a knowledgeable judge who evaluates entrants by comparing them with standard varieties currently on the market. The tests are blind tests—judges do not know the source (company or plant breeder) or variety name of the contestants for an AAS award. Some of the traits noted in the vegetable trials are earliness, yield, uniformity, taste, disease resistance, shelf life, and appearance. At the end of the season, each judge submits their findings to the AAS which, in turn, compile the reports from all testing sites and look for consistently high-scoring entrants as possible AAS Winners. There are two types of awards given, the AAS Award and the Gold Medal Award. The AAS Awards are given every year and represent varieties that are outstanding and improved over others on the market. Gold Medal Awards are reserved for achievements that are considered “breeding breakthroughs.” Gold Medal Awards are generally only given once every five to ten years. Once winners are selected, breeders are allowed to release their varieties to the general public for sale.

The 2006 AAS Vegetable Trial evaluated nine entrants:

1. A snow pea with edible pods (afila type having pea-like leaves).
2. A stringless snow or English pea with edible flat pods.
3. A pepper with small, orange colored jalapeno-shaped sweet fruit.
4. A pepper with large, heart-shaped, hot fruit that are dark green to brown in color.
5. A piel de sapo or Spanish type melon having a yellow rind and cream-colored flesh.
6. A semi-bush spaghetti type squash having small fruit with “angel hair” flesh texture.
7. A winter kabocha squash having a semi-bush plant and small orange-red fruit.
8. A tomato with indeterminate plant growth and small plum-shaped, vivid red fruit.
9. A large reddish-purple radish (skin and flesh).

Each entrant was grown in replicated plots with at least two other established, similar varieties for comparison purposes. Common cultural practices were used including irrigation. While all entrants performed well, most did not show substantial improvements over their comparison varieties or market standards. However, two entrants stood out and were rated superior to their comparisons. The piel de sapo type melon matured earlier and had a consistently high Brix (measure of sweetness) and more pleasing flavor than its comparisons. It was unique in that the rind color was a bright yellow and not the typical dark green. The small plum tomato scored well because the indeterminate plant bore grape-sized tasty fruit with uniform size, shape, and intense red color.

AAS Winners will be announced in January 2007. For more information and a recent list of AAS winners, visit [www.aaswinners.com](http://www.aaswinners.com) or [www.all-americanselections.org](http://www.all-americanselections.org).