Video of the Week: How to Make a Grow Light

MISCELLANEOUS

All-America Selection Winners for 2018

All-America Selections tests and introduces new flowers and vegetables each year that have done well in trials across North America. This year there were six vegetable winners and six flower winners that were national winners.

Descriptions and images below are taken directly from All-America Selection materials. For more detailed information including how to grow, see https://all-americaselections.org/product-category/year/2018/

Vegetables

Corn, Sweet American Dream
2018 Edible- Vegetable Winner

AAS Judges selected American Dream as their top trial choice and it just so happens to come from the same company that introduced Honey ‘N Pearl, an AAS winner from 1988. In a tight trial, American Dream was pitted up against Honey ‘N Pearl and came through as the winner! With its excellent germination, very tender, super sweet kernels, this newbie will make a great addition to the home garden. American Dream matures slightly earlier than the comparisons and produces vigorous, healthy plants with cobs that have good tip fill of bi-colored kernels. Plants grow 6-7 feet tall and mature in 77 days after planting the seed. Perfect fresh, roasted, grilled, canned or frozen.

Pak Choi Asian Delight F1
2018 AAS Edible – Vegetable Winner

Asian Delight F1 Pak Choi (or Bok Choy) is a Chinese Cabbage that outperformed the comparisons by leaps and bounds. Judge after judge noted how this Pak Choi does not bolt like the comparisons, even weeks after other varieties went to seed. That means the yield from this AAS Winner can be double or even higher than that of other Pak Choi on the market. Asian Delight forms small to mid-size (5-7 inch) heads that have a tasty, tender white rib and dark green, textured leaves. One judged seeded his trial three times and all three times Asian Delight did not bolt whereas the comparisons did. “This is the best white stem mini Pak Choi I have ever seen.” That’s quite an endorsement!
**Pepper cayenne Red Ember F1**  
2018 AAS Edible – Vegetable Winner

Add some spice to your life with this new cayenne pepper named Red Ember F1! This new AAS pepper Winner won over judges by being earlier to mature than the comparison varieties. Early maturity is an important feature for gardeners who live in climates with a shorter growing season. Red Ember produces a large number of rounded end fruits on durable, medium-sized plants. Judges described the thick-walled fruits as spicy, but tastier than the traditional cayenne, with just enough pungency for interest. Use this new cayenne pepper for a multitude of purposes and throughout the seasons.

**Pepper habanero Roulette F1**  
2018 AAS Edible – Vegetable Winner

Roulette F1 resembles a traditional habanero pepper in every way (fruit shape, size and color, and plant type) with one exception – No Heat! This AAS National Winner’s one-ounce fruits are red with thick walls when it matures and a nice citrusy (no heat) habanero flavor! Gardeners will be delighted with the earlier production of large, uniform fruit and a very high yield. One judge noted that each plant easily produces 10-11 fruits at one time and up to 100 per season so there are plenty to eat fresh, cook with, and enjoy! For an early fruit production of a habanero pepper that will charm even those that don’t like it hot, take your chances… Roulecity is the perfect choice.

**Tomato, cocktail Red Racer F1**  
2018 AAS Edible – Vegetable Winner

Red Racer, a cocktail size tomato, produced small, uniform fruits with great taste in the AAS Trials. Cocktail tomatoes have a good sweet/acid balance and are a smaller variety tomato (although larger than cherry or grape tomatoes). These tomatoes are uniform in size and mature as a cluster of fruits. The compact determinate plants produced a huge yield 7-10 days earlier than the comparisons and are ideal for small space and container gardens. One judge summed up this winner saying “Red Racer is small in size but big in taste!” Available in both organic and conventional seeds.
**Tomato Valentine F1**  
2018 AAS Edible – Vegetable Winner

Hands down, the judges agreed this was the most appealing grape tomato they trialed. With an appetizing deep-red color, it has a very sweet (Brix of 7-9) taste and will hold longer on the vine without cracking or losing the excellent eating quality. Valentine F1 tomato is quite prolific and will mature earlier (55 days from transplant) than the comparisons used for this entry. Gardeners should plan on staking the indeterminate vines for best results. Tomato lovers will appreciate the sweet, firm flesh that is meaty enough to resemble a Roma tomato but in a smaller, grape-type fruit. These easy-to-harvest tomatoes can take the summer heat and keep on producing!

**Flowers**

**Canna South Pacific Orange F1**  
2018 AAS Flower Winner

Sister to 2013 AAS Winner South Pacific Scarlet, this newest AAS Winner is compact in habit and well suited for both landscape and container use. This variety is more vigorous, more uniform, and has more basal branching than comparison cannas. It offers an outstanding bloom color in an attractive, vivid bright orange that contrasts nicely with the bright green foliage. Pollinator gardens will love this addition of an attractive canna that sports uniformly colored flowers over a long blooming period. Bonus: this canna is grown from seed, not tuber, meaning less chance of succumbing to disease.

**Cuphea FloriGlory Diana**  
2018 AAS Ornamental Vegetative Winner

Cuphea, commonly known as Mexican Heather, is an ideal plant for borders, mass plantings and containers. FloriGlory Diana was highly praised by the AAS Judges for its larger flowers, impressive number of flowers and the darker, more intensely colored magenta flowers. The dark green foliage complement the flowers and really makes a statement for this new AAS Winner. With FloriGlory Diana, gardeners will be delighted with the compact (10-12 inch) size, longer flowering time, heat and weather tolerance.
**Gypsophila Gypsy White Improved**
2018 AAS Flower Winner

Semi-double blossoms on this new, improved variety of gypsophila will make your garden sparkle! Not only are the flowers semi-double, but are also a bit larger in size and produce more flowers per plant, resulting in a fluffy white mound of beauty. Gypsy White Improved has better branching and a better growth habit than its predecessor, making it perfect for containers, small spaces and garden beds. A much longer bloom season and better heat tolerance than Gypsy Compact White will make this your new garden favorite. Overall it is a beautiful little plant with many possibilities!

PLEASE NOTE: This is NOT the invasive perennial *Gypsophila paniculata* but instead, the non-invasive *Gypsophila muralis*.

**Marigold Super Hero Spry**
2018 AAS Flower Winner

When one of the discerning AAS judges says, “I’d love to have this in my yard!”, you know you have a winner! Super Hero™ Spry is a lovely compact (10-12 inches) French marigold with dark maroon lower petals and golden yellow upper petals perched on top of the dark green foliage. The list of winning attributes continues: a more uniform and stable color pattern, earlier to bloom and no deadheading required. These stunning blooms make any garden fit for a Super Hero!

**Ornamental Pepper Onyx Red**
2018 AAS Flower Winner

Onyx Red is one of those stunning double-take plants that steal the show! This breeding work has resulted in an unprecedented compact, well-branched ornamental pepper adorned with eye-catching dark black foliage. The contrast between the diminutive black foliage and tons of shiny red fruits is striking and makes a bold statement in the garden. Plants are vigorous, continually growing but retain their neat, compact habit, making Onyx Red a wonderful plant for beds, borders, containers and dramatic mass plantings.

Naturally compact plants are perfect for a potted plant program as well as for an annual bedding plan where earliness and retail readiness are important factors.
Zinnia Queeny Lime Orange
2018 AAS Flower Winner

A “WOW” color in an easy-to-grow zinnia is what Queeny Lime Orange brings to the garden. Sporting lovely, large, dahlia-like blooms on a sturdy, compact plant, this variety provides cut flower gardeners and growers with a wonderful hue for today’s floral trends. The unique color evolves from dark coral/peach/orange to a light peach with a dark center as the flowers age. In the trial gardens, visitors loved the show-stopping color and large blooms, making it this year’s fan-favorite. This new AAS Winner is also perfect for cut flower gardens as each uniform plant produces prolific deeply fluted blooms that last about 3 weeks without preservatives or feed.

Newer Lights Available for Indoor Gardeners

Many gardeners use fluorescent lights to start young vegetable and flower plants during the spring or to grow certain houseplants all year long. Traditionally, we have used fixtures with T-12 lamps suspended a few inches above the tops of the plants. However, T-12 lamps are fading away due to newer lamps that are a better choice for indoor gardens. These are known as T-8 and T-5 lamps. The number after the “T” refers to the diameter of the lamp in eighths of an inch. Therefore, a T-12 lamp is 12/8 or 1.5 inches in diameter and are what most people are familiar with. A T-8 is 8/8 or 1 inch in diameter, and a T-5 is 5/8 of an inch in diameter.

So, does a smaller diameter mean less light? Not at all. In fact, the T-5 can be the brightest of the three. Another advantage for these newer lamps is they use less electricity per lumen. The traditional 48-inch T-12 is rated at 40 watts. However, there are newer styles of T-12's that are 34 watts. The T-8 is rated at 32 watts and the T-5 at 28 watts.

This sounds too good to be true. Are there drawbacks? Maybe so or maybe not. First is cost if you have to replace T-12 fixtures to convert to a T-8 system. However, newer fixtures may be able to handle either T-12's or T-8's. Therefore, if you purchased fluorescent fixtures in the last few years, check to see if they are rated for T-8's before replacing them. Note that lamp costs are comparable between T-12's and T-8's. The T-5 lamps may be more expensive so check prices before converting.

The question becomes, is it worth it? If you have a T-12 fixture that is rated for T-12's only and are satisfied with your results, then maybe not. However, if you are investing in new fixtures or have fixtures that can use either T-12's or T-8's, then go with the T-8's. They will use less energy,
last longer and provide more light. Prices for T-5's have been dropping so you may want to consider them as well.

The newest technology is LED lighting. LED’s have several advantages over other types of lighting including durability, long life, a cool running temperature and more latitude in choosing specific wavelengths of light. Traditionally, they have been very expensive but costs are dropping rapidly. We are starting to use LED’s as supplemental lighting in the University greenhouses but would suggest only using them on a trial basis at home until you see how they perform for you. (Ward Upham)

WOODY PLANTS

Caddo Sugar Maples

Sugar maples often have significant problems with our Kansas weather. Our hot, often dry summers and windy conditions can shorten the life of these trees. However, some sugar maples are better adapted to Kansas conditions than others. Our John C. Pair Horticulture Center has evaluated sugar maples for well over 20 years and has identified selections that are much better adapted to Kansas. Of particular interest are the Caddo sugar maples which originated from an isolated population in Caddo, County, Oklahoma. These are true sugar maples and are considered an ectotype and are more drought tolerant, better adapted to high pH soils and more resistant to leaf scorch and tatter than the norm. Just how resistant to scorch is impressive. The last three weeks of August in 2003 saw temperatures at our research station over 100 degrees each day with no rain for the month prior. All other sugar maples in the trial had severely scorched leaves. Not a single leaf of any of the caddo maples was scorched. Leaf water potential readings taken pre-dawn showed all other trees in the trial past the wilting point while the Caddo maples were barely stressed.

Another interesting characteristic of caddo maples is that they tend to retain their leaves in the winter and therefore have been suggested as screens or for use in windbreaks. Dr. John Pair, the late director of the Horticulture Center, selected and released two Caddo maples over 10 years ago. Both these selections color early and have consistent good red fall color. Drought tolerance and resistance to leaf scorch and leaf tatter are exceptional. However, neither will do well in a heavy clay soil that is frequently saturated. These trees can be damaged or killed if planted in wet sites.

The first selection, ‘Autumn Splendor’, has the traditional sugar maple growth pattern and needs plenty of room to mature. ‘John Pair’ is smaller and more compact and more likely to fit a residential landscape. This tree is also noted for a dense, uniform crown. If you are in the market for a sugar maple, consider these before making a final decision. (Ward Upham)

Contributors: Ward Upham, Extension Associate
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The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

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