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2020 ALL-AMERICA SELECTIONS, PART 1

All-America Selections is an independent non-profit organization that tests new, never-before-sold varieties for the home gardener. After a full season of anonymous trialing by volunteer horticulture professionals, only the top garden performers are given the AAS Winner award designation for their superior performance. Their mission statement is "To promote new garden varieties with superior garden performance judged in impartial trials in North America. There are 14 winners this year. They include:

Coleus Main Street Beale Street: 2020 AAS Ornamental Winner

The first-ever coleus to be named an AAS Winner! Main Street Beale Street coleus is an outstanding variety exhibiting deep red foliage that holds its color extremely well in the garden. The rich color doesn't fade, bleach or get spotty as the season moves into late summer. The lush, bushy plant grows uniformly and as a huge bonus, does not flower until very late in the season – up to 6 weeks later than the comparisons! A unique feature of this coleus is that it can be successfully grown from full sun to full shade, making it an ideal foliage item for anywhere in the garden. Growers, retailers, landscapers, and homeowners will all appreciate the beautiful color and uniform height of this coleus.

Available in plant form only.

Cucumber Green Light F1: 2020 AAS Edible – Vegetable Winner

This little beauty is an excellent mini cucumber, said many of the AAS Judges. The yield was higher than the comparison varieties with more attractive fruit, earlier maturity, and superior eating quality. "I would absolutely grow this in my home garden" commented one judge. Grow Green Light on stakes or poles for a productive, easy-to-harvest vertical garden that will yield 40 or more spineless fruits per plant. Pick the fruits when they're small, between 3-4" long, and you'll be rewarded with great tasting cucumbers, even without peeling. Succession plantings will ensure a summer-long harvest. Fun fact: This cucumber is parthenocarpic meaning the flowers are all female and the fruits are seedless without needing to be pollinated.

Echinacea Sombrero® Baja Burgundy: 2020 AAS Herbaceous Perennial Winner

Sombrero® Baja Burgundy will add a bold accent to sunny gardens with its vibrant, deep violet-red blossoms. The beautiful flower color is without equal among coneflowers and is perfect for cut flowers. After being trialed over three tough winters, the AAS Judges noted this standout's hardiness, sturdy branching, and floriferous blooming habit. Birds and pollinators certainly flock to this deer-resistant beauty making it a dual-purpose plant. Gardeners will enjoy prolific blooms from mid-summer until the first frost.

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Nasturtium Tip Top Rose: 2020 AAS Flower Winner

Tip Top Rose is a strong yet compact nasturtium with unique and showy rose-colored flowers showcased above medium green foliage. These 14×18" mounded plants were more floriferous than the comparisons varieties in the AAS trials, producing a bigger and better garden show. The uniquely colored flowers are a great addition to the nasturtium family especially since they don't fade as they age. Judges described the color as "a warm, bright rose with less of the black undertones typical in nasturtium flowers." Tip Top Rose remained healthy throughout the season. It makes a great winter annual in warmer climates and a spring annual in other areas, whether used in containers or in the landscape. The whole plant stayed uniform and healthy whereas other varieties struggled. Bonus: This nasturtium is great for pollinator gardens and both the leaves and flowers are edible!

Pumpkin Blue Prince F1: 2020 AAS Edible – Vegetable Winner

"Princely" is defined as being sumptuous and splendid; this AAS Winner lives up to its name! For any edible entry to become an AAS Winner, it must outperform the comparisons and Blue Prince Pumpkin certainly scored high in the areas of maturity (earlier), yield, fruit size, and uniformity, color, taste, and texture. Vigorous trailing vines produce 7-9 pound beautiful blue flattened pumpkins with non-stringy, deep orange flesh with savory sweetness. These pumpkins are as pretty as they are delicious; after fall decorating, bake the flesh for a smooth and creamy treat. Of all the varieties trialed, Blue Prince was first to flower and fruit which is beneficial for gardeners with a shorter growing season. Plus, this winner has slightly better disease resistance than the comparisons. A judge's testimonial: "Overall, if I was looking for a blue pumpkin to display AND eat, I'd pick this entry every time!"

Rudbeckia x American Gold Rush: 2020 AAS Herbaceous Perennial Winner

American Gold Rush's bright, golden-yellow flowers with black centers and arched petals is a gorgeous addition to any garden. This compact, upright domed-shaped beauty has narrow 2-inch wide hairy foliage bred for its resistance to Septoria leaf spot. This hybrid shows no signs of the fungus even in wet, humid conditions. Blooming from July to September, with some color up until frost, this cultivar has smaller foliage and shorter height compared to other rudbeckia varieties. Incredibly easy to grow and pollinators love it. Destined to be the new rudbeckia staple for gardens and landscapes!

Tomato Apple Yellow F1: 2020 AAS Edible – Vegetable Winner

If you've never tried an apple-shaped tomato, now is the time. This AAS Winner offers incredible garden performance, a uniquely dimpled apple-shaped fruit with a deliciously sweet citrusy taste and firm, meaty texture. Indeterminate 5' tall vines produce abundantly in clusters, resulting in up to 1,000 fruits per plant. The fruits are an eye-catching, bright, lemon yellow color reminiscent of the "Big Apple's" taxi-cab colors. Judges were excited that a non-splitting, long-holding, uniformly shaped tomato had such good eating quality. With just the right balance of sugar and acid flesh in a firm exterior, Apple Yellow would be perfect stuffed with a savory cheese for a delicious appetizer.

The next seven AAS winners will be listed in the March issue of Garden Talk.

Source: <https://all-americanselections.org/product-category/year/2020/>

A LITTLE ROSE HISTORY

For centuries, roses have inspired love and brought beauty to those who have received them.

The rose became the national flower of the United States in 1986 under President Ronald Reagan. June has been designated as National Rose Month. The world's oldest living rose is thought to be over 1000 years old. It is thought to have been planted in the early 800s when the church itself was founded. Today it continues to flourish on the wall of the Hildesheim Cathedral of Germany.

The largest living rose bush in the world is in Tombstone, Arizona. This Lady Banks Rose, will celebrate her 135th blooming season in April, 2020. She was planted in Tombstone as a rooted cutting from Scotland in 1885, and unlike the various gun-fighters who stayed a short time and went on their way, she has remained, growing more beautiful with the passing years. The unbelievable spread of branches and blooms is supported by a trellis system of pipes and posts that covers an area of over 8,000 square feet. The trunk of the tree is approximately 12 feet in circumference. The Rose Tree is Tombstone's most famous 'Shady Lady'.

For more interesting history on the world's largest rose bush see this website <https://tombstonerosestree.com/worlds-largest-rose-tree/>.



Soil Testing: The Why, What, Where, How and When

Justin Keay, MU Extension Field Specialist in Horticulture

This is the second article in a three part series.

The image below is an example of the soil test results you will receive. The left column of the table lists the pH value of your soil, the lbs./acre of phosphorous, potassium, calcium, magnesium as well as the percentage of organic matter. The "Rating" part of the table gives you an idea of the relative value of nutrients and pH in your soil. The bottom row of this table also lists neutralizable acidity and CEC, or cation exchange capacity. These two terms will be explored in detail in a future article.

SOIL TEST RESULTS		RATING					
		Very low	Low	Medium	High	Very high	Excess
pHs	6.5	*****					
Phosphorus (P)	229 lbs/a	*****					
Potassium (K)	452 lbs/a	*****					
Calcium (Ca)	5070 lbs/a	*****					
Magnesium (Mg)	511 lbs/a	*****					
Organic Matter:	3.1 %	Neutr. Acidity: 0.5 meq			CEC: 15.9 meq		

Fertilizer & Limestone Recommendations (lbs/1000 sq ft)

Crop	Nitrogen (N)	Phosphorus(P ₂ O ₅)	Potash (K ₂ O)	Zinc(Zn)	Sulfur(S)	LIME
9 NATIVE perennial bedding plants	0.5	0.0	0.0			0
12 NATIVE shrubs-slightly acid loving	0.5	0.0	0.0			0
27 NATIVE GRASSES other or not specifi	0.0	0.0	0.0			0

Comments: ---Some herbicide labels list restrictions based on soil pH in water. Use the estimated pH in water of 7.0 as a guide to the label. If you wish to have soil pH in water analyzed, contact your dealer or local Extension specialist listed below.
 ---The soil should be tested every 2 to 3 years to determine the effects of your fertilization practices and to develop a new set of fertilizer and limestone guidelines.

***The soil has adequate calcium and an adequate pH for perennial bedding plants (). Application of lime, wood ashes, or calcium rich fertilizer is not recommended.

***The soil needs additional organic matter for gardens and crops other than lawns. See MU Publication G6950, "Steps in Fertilizing Garden Soil" and G6956, "Making and Using Compost".

***The soil has adequate calcium and an adequate pH for shrubs-slightly acid loving () (e.g. forsythia, honeysuckle, lilac). Application of lime, wood ashes, or calcium rich fertilizer is not recommended.

need to add to your soil to support optimal plant growth. The recommendations for macronutrients and lime are listed in pounds per 1000 square feet.

Underneath the fertilizer and limestone recommendations section of the soil test report, you will find a comments section that provides additional information to guide soil management. The comments will tell you how often to test your soil, if you need to adjust pH and how to adjust it, and if you need to add additional organic matter to the soil. You will often see MU Extension publications listed in this section. The suggested publications are specific to the needs of the soil sample submitted and are helpful in guiding soil management practices.

Examining the soil test results

The pH of 6.5 found in the above example, is within an acceptable range for the selected crop (native perennials), therefore the recommendation for this soil is to add no lime. In circumstances where your pH is too low, i.e. too acidic, for the crop selected, lime will be recommended to raise the soil pH. If the crop selected was blueberries (an acid-loving crop), and the soil pH was too high, the soil test would give recommendations to add sulfur, which is used to lower soil pH.

You will notice in the above results that both phosphorous and potassium are listed in the very high range. This is a very common occurrence in urban landscapes. High levels of both phosphorous and potassium are often an indication that a homeowner has used a complete fertilizer, such as 12-12-12, on an annual basis. Plants require more nitrogen for growth than phosphorous or potassium, therefore using a complete fertilizer (with equal amounts of N-P-K) year after year will cause both phosphorous and potassium to build up to high or even excessive levels in soils. Calcium and magnesium are also both at high levels in the test results above. Because the results show that phosphorous, potassium, calcium, and magnesium levels are all high or very high, the recommendation is not to add any of these macronutrients to the soil.

The organic matter listed in these results is 3.1%. This level of organic matter would be acceptable for lawns, but not for any other type of crop. The comments section of the report notes that the soil needs additional organic matter and provides the titles of several helpful MU publications. The listed publications will guide you in the steps necessary to increase organic matter levels in the soil.

Below the table, you will see the heading "Fertilizer & Limestone Recommendations". Underneath this heading and on the left hand side you will see the crop selected, which in this case is perennial bedding plants. If you submit a soil sample, you will be able to select up to three different crops, and for all three you will receive specific fertilizer recommendations, as well as pH adjustment recommendations if necessary. The numbers to the right of the selected crop will tell you what you

GARDENING TIPS FOR FEBRUARY

Ornamentals

- Water evergreens if the soil is dry and unfrozen.
- Inspect summer bulbs in storage to be sure none are drying out. Discard any that show signs of rot.
- Winter aconite (*Eranthis* sp.) and snowdrops (*Galanthus* sp.) are hardy bulbs that frequently push up through snow to bloom now.
- Take geranium cuttings now. Keep the foliage dry to avoid leaf and stem diseases.
- Sow seeds of larkspur, sweet peas, Shirley poppies and snapdragons where they are to grow outdoors now. To bloom best, these plants must sprout and begin growth well before warm weather arrives.
- Seeds of slow-growing annuals like ageratum, verbena, petunias, geraniums, coleus, impatiens and salvia may be started indoors now.
- Start tuberous begonias indoors now. "Non-stop" varieties perform well in this climate.
- Dormant sprays can be applied to ornamental trees and shrubs now. Do this on a mild day while temperatures are above freezing.

Fruit

- Inspect fruit trees for tent caterpillar egg masses. Eggs appear as dark brown or gray collars that encircle small twigs. Destroy by pruning or scratching off with your thumbnail.
- Collect scion wood now for grafting of fruit trees later in spring. Wrap bundled scions with plastic and store them in the refrigerator.
- When pruning diseased branches, sterilize tools with a one part bleach, nine parts water solution in between cuts. Dry your tools at day's end and rub them lightly with oil to prevent rusting.
- Begin pruning fruit trees. Start with apples and pears first. Peaches and nectarines should be pruned just before they bloom.
- Grapes and bramble fruits may be pruned now.
- Established fruit trees can be fertilized once frost leaves the ground. Use about one-half pound of 12-12-12 per tree, per year of age, up to a maximum of 10 pounds fertilizer per tree. Broadcast fertilizers over the root zone staying at least one foot from the tree trunk.

Vegetables

- Run a germination test on seeds stored from previous years to see if they will still sprout.
- Start onion seeds indoors now.
- Season extending devices such as cold frames, hot beds, cloches and floating row covers will allow for an early start to the growing season.
- If soil conditions allow, take a chance sowing peas, lettuce, spinach and radish. If the weather obliges, you will be rewarded with early harvests.
- Sow seeds of broccoli, cauliflower, Brussels sprouts and cabbage indoors now for transplanting into the garden later this spring.

Miscellaneous

- When sowing seeds indoors, use sterile soil mediums to prevent diseases. When seeds sprout, provide ample light to encourage stocky growth.
- Repot root-bound house plants now before vigorous growth occurs. Choose a container that is only 1 or 2 inches larger in diameter than the old pot.
- To avoid injury to lawns, keep foot traffic to a minimum when soils are wet or frozen.
- Branches of pussy willow, quince, crabapple, forsythia, pear and flowering cherry may be forced indoors. Place cut stems in a vase of water and change the water every 4 days.
- Maple sugaring time is here! Freezing nights and mild days make the sap flow.

-Missouri Botanical Garden-

UPCOMING EVENTS

February 14: Happy Valentine's Day!

March: Farmers' Market/ Producer Workshop, Kirksville. See March issue for details.

May-August: Garden n' Grow, Kirksville.

May 20-June 24: Master Pollinator Program, Wednesdays, 1-4 pm (when pollinators are most active), Macon & Kirksville. Watch for more details in upcoming issues.

August: Garlic workshop, in Moberly.

September: Master Gardener training

September 18-20, 2020: Missouri State Master Gardener Conference. Capital Plaza Hotel, Jefferson City.

October or November: Mushroom workshop, Winigan, MO. Details in upcoming issues.

September 13-17, 2021: Mark your calendars for the [2021 International Master Gardener Conference](#) in Norfolk, VA.



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