

Green Industry News

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CALENDAR OF EVENTS

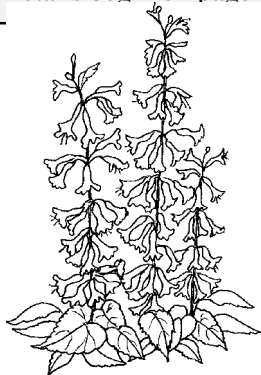
MDA Pesticide Recycling Program
August - October
2000

**Association of Specialty Cut Flower
Growers Mid-Atlantic Regional Meeting**
August 7, 2000

**Maryland Cooperative Extension Cut
Flower Tour**
August 8, 2000

**MGGA Conference on Nutrient
Management**
October 24, 2000

Details begin on page 5



Sea asparagus offers bug resistance

Stanton Gill

Seaphire International of Phoenix, Arizona is developing a termite-proof particleboard made from a plant. The desert growing plant is called sea asparagus and is grown in Mexico and Eritrea, Africa (a small African country on the Red Sea). This is a most unusual plant since it is very tolerant of high salt levels. In fact, it can be irrigated using salt water. The plant is harvested and processed into particleboard. The interesting thing is that the wood of the plant has an extremely high salt content of over 450 milligrams per ounce. This high salt content makes it unpalatable to termites. The high salt content also retards fire. The particleboard should be commercially available in the United States in 2002.

Source: Popular Science, August 2000.

Stanton Gill is a regional specialist for commercial horticulture at the Central Maryland Research and Education Center, Ellicott City, Maryland

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Fire Ants Stanton Gill

If you have been visiting the south you might have had the misfortune to step onto a fire ants mound. It is an experience you will not soon forget. Hot fire sparks against bare skin would be comparable. Fire ants, *Solenopsis* spp., are originally native to South America. They have been moving slowly north for the last half of the 20th century. Since they are a southern species of insect, it appeared that they were not be able to survive Maryland winters. There is a quarantine against this pest that has helped keep this pest from moving into Maryland.

The situation appears to be changing. In the last year, three confirmed fire ant colonies have been found in Maryland landscapes in the Metropolitan area of Baltimore/Washington/Annapolis. Each of these colonies appeared to have been established for at least a year. They were most likely brought in on nursery plant material that slipped through the quarantine inspection process. The milder winters of the past several years may have contributed to the survival of fire ants in this area.

If you find a suspicious ant mound that you suspect are fire ants, contact an Extension office or the Plant Protection Division of the Maryland Department of Agriculture. Fire ants make a mound of soil over the colony. When you disturb the mound the ants swarm out of the ground in large numbers. If you are bitten and they hit your wounded skin with their formic acid it will burn. Fire ants have two distinct nodes in the petiole (area between the abdomen and thorax) and two segments in the antennal club. The abdomen is very hairy.

Keep your eye out for this pest. If detected, the Maryland Department of Agriculture will work with you in eliminating the colony.



Stanton Gill is a regional specialist for commercial horticulture at the Central Maryland Research and Education Center, Ellicott City, Maryland.

All America Selection Winners for 2001 Russell Balge

The All America Selection winners are newly introduced flowers and vegetables that have undergone a competitive evaluation alongside existing comparable cultivars in some 30 flower and 25 vegetable gardens from Canada to Mexico. They were observed to do well under all climatic conditions.

This year, five flowers submitted by the world's private, commercial, and government breeders and judged by the directors of botanic gardens and horticulturists from leading universities, have won All America Selection awards.

***Eustoma* 'Forever Blue'**

Eustoma 'Forever Blue', or more popularly Lisianthus 'Forever Blue', has a much improved, multi-branching habit, bearing single-flowered, 2 ½-inch-wide, blue blooms over a long time. It was introduced by Pan American Seed. 'Forever Blue' matures earlier than other Lisianthus, taking only 21 weeks to bloom from seed. It performs well both in the greenhouse as a 4-inch potted plant and in the landscape as a bedding plant.

***Helianthus* 'Ring of Fire'**

Helianthus 'Ring of Fire', or more popularly Sunflower 'Ring of Fire', features bicolored, deep red petals edged in gold, surrounding a wide chocolate-brown center. It rapidly produces a 2 ½-inch-tall marketable pack for growers that should be sold "green", that is, without any blooms. 'Ring of Fire' matures at 4 ½ feet tall in the border 120 days from seeding. Its long stems make it perfect for cut flower production. 'Ring of Fire' was introduced by Benary Seed of Germany. Its seed head is very popular with wildlife.

***Nicotiana* 'Avalon Bright Pink'**

Nicotiana 'Avalon Bright Pink', or more popularly Flowering Tobacco 'Avalon Bright Pink', is a compact plant with a good branching habit. It

reaches a height of 7 to 10 inches tall with a diameter of 10 to 12 inches. The abundant, bright pink, star-shaped flowers are 1 ½ inches in diameter and are produced all season long. ‘Avalon Bright Pink’ is suitable for color bowls and patio planters. The compact plant reaches a height of 7 to 10 inches, a diameter of 10 to 12 inches wide, and is nearly maintenance-free in the landscape. ‘Avalon Bright Pink’ was introduced by Floranova. It blooms in 90 days from seed.

***Portulaca* ‘Margarita Rosita’**

Portulaca ‘Margarita Rosita’, or more popularly Moss Rose ‘Margarita Rosita’, features a season-long display of dark pink, 1 to 1 ½-inch-diameter, semi-double flowers on a compact, mounded, 14-inch-wide plant. The spreading nature of the plant makes it ideal for cascading over the edge of containers or walls. ‘Margarita Rosita’ is long blooming and very heat and drought tolerant. ‘Margarita Rosita’ was introduced by Waller Genetics. It blooms in 45 to 50 days from seed. The seed is available in pelleted form.

***Zinnia* ‘Profusion White’**

Zinnia ‘Profusion White’ joins previous Gold Medal All America Selection winners *Z.* ‘Profusion Orange’ and *Z.* Profusion Cherry’. Like its companions, ‘Profusion White’ has a great garden habit, producing a season-long explosion of 2 to 2 ½-inch-wide, single, daisy-like flowers on a compact, multi-branched, mounded, 10-inch-tall by 12-to 24-inch-wide plant. ‘Profusion White’ thrives in a wide range of climates and is disease-resistant. It blooms in 60 to 65 days from seed and was introduced by Sakata Seed.

Russell Balge is a regional specialist at the Western Maryland Research and Education Center in Keedysville, Maryland.



Production/Postproduction Factors For *Aphelandra*

Thomas M. Blessington, David L. Clement,
Rondalyn M. Reeser, and Sarah E. Tater

INTRODUCTION

- Scientific name: *Aphelandra squarrosa*
- Common name: Zebra Plant
- Native to tropical parts of South America, mainly Brazil
- Blooms under low light levels in interior situations, 150-200 footcandles (fc)
- Grown for its attractive multi colored leaves and yellow flowers

GROWTH AND DEVELOPMENT

- Prefers well drained growing media with good aeration properties
- Media pH of 5.5 to 6.5 is preferred
- Space pots so foliage doesn’t overlap
- Optimum light levels are 800 to 1,500 fc
- Higher light levels (above 1,500 fc) result in short, puckered foliage
- Lower light levels (below 800 fc) result in long, narrow leaves
- Optimum day temperature is 80°F
- An acceptable range is 65-90°F
- Avoid extremes in wet and dry
- Commonly irrigated by drip systems, capillary mats and ebb-and-flow systems
- Moderate feeders, apply 200 ppm N at each irrigation with a 20-10-20 source
- Supply extra iron and calcium for best growth
 - Calcium: test irrigation water for pH since water influences pH of media, if pH < 6.0, add dolomitic limestone to media
 - Or if pH does not require adjustment switch to a fertilizer source that supplies N in the form of calcium nitrate (CaNO₄) such as 15-0-0
 - Or apply fertilizers that contain high percentages of calcium such as 20-0-20, 21-0-20, 15-0-15, or 13-2-13
 - Apply iron chelate as a drench at a rate of 1 oz.

- per 50 sq. feet
- Do not over fertilize as this can lead to high soluble salts
- Drought combined with high soluble salts can cause leaf burn and leaf drop
- Excess fertilizer can increase chances of *Myrothecium* leaf spot and *Phytophthora* stem rot

- **Nutritional deficiencies:**

- Under fertilized plants have pale leaves and grow slowly
- Iron- new foliage turns yellow, can indicate root rot problems
 - Apply an iron drench

PROPAGATION

- Tip cuttings most successful
- Tip cuttings should have at least one set of full-sized leaves
- Leave at least two sets of full-sized leaves on stock plant
- Replace stock plants when they lose vigor
- Apply rooting hormone to cuttings
- Mist cuttings every 30 minutes
- Roots form in 3 weeks in warm temperatures, 6 weeks in cool winter conditions

DISORDERS

- **Common problems**

- Leaf crinkle or leaf stunt
 - Symptoms: healthy plants develop small, twisted leaves
 - Cause unknown, possibly results from the green part of leaf outgrowing the white in warm, high light conditions
 - Destroy affected plants
- High soluble salt levels and dry conditions can result in marginal burn of older leaves and leaf drop

- **Diseases**

- *Myrothecium* leaf spot
 - Symptoms: forms brown circular spots, fruiting bodies are visible on underside of leaves, drop of infected leaves
- *Corynespora* causes similar leaf spots but without the fruiting bodies
- *Botrytis* can cause foliar disease in cool, moist weather
- Plants grown in overly moist conditions can develop *Pythium* and *Rhizoctonia* root rot

- **Insect pests**

- Usually pest free, some problems with mealybugs, aphids, thrips, mites and scale insects
- Mites are too small to see but cause leaf curl and distortion
- Thrips damage results in brown stippled patches on leaves and flowers

CONSUMER CARE

- Excellent houseplants that last for years with proper care
- 150-200 fc is optimum for growth, no direct sunlight
- Protect from cold drafts
- Allow media to dry between waterings to avoid root rot problems
- Fertilize with 20-10-20 at 75-100 ppm N every 1-2 months
- Cultivars:
 - 'Dania' and 'Louisae': compact dark green growth with white veins and yellow flowers
 - 'Apollo' and 'Red Apollo': variegated forms with white or ivory

Thomas M. Blessington and David L. Clement are regional specialists and Rondalyn M. Reeser, and Sarah Tatar are technicians with the Central Maryland Research and Education Center in Ellicott City, Maryland.

Calendar of Events

Association of Specialty Cut Flower Growers Mid-Atlantic Regional Meeting - August 7, 2000

Location: Jeffersonton Community Center and Wollam Gardens, Jeffersonton, Virginia

Contact: Bob Wollam, 540-937-3222

Cost: \$40 for ASCFG members (\$55 non-members)

Topics: Fall Direct Seeding; Thrips and Mite Control and How to control voles; Lisianthus: New varieties and crop requirements; Overplanting schemes: Getting the most out of good space; Bouquet Making and Farm Tour and Hands on Demos

Maryland Cooperative Extension Cut Flower Tours on August 8, 2000

Location: Tour will begin at CMREC in Ellicott City and travel to north and central Maryland.

Cost: \$40 person for ASCFG and MGGA members; \$45 per person if not a member

Contact: Suzanne Klick at 301-596-9413

MDA Pesticide Container Recycling Dates (9:00 to 3:00 each day) - For more information: 410-841-5710

August 7, September 5 and October 2: Nicholson Transfer Facility, Earl Nicholson RD

August 11, September 8 and October 6: Mid Shore Regional Solid Waste Facility on Barker's Landing RD

August 18, September and October 4: Wicomico County Landfill on Brick Kiln RD

August 15, September 12 and October 3: Scarboro Landfill, 3241 Scarboro RD

August 25 and September 22: USDA Research Center, Bldg. 302, Visitor Center on Powder Mill RD

August 2 and September 7: St. Andrew's Landfill, Rt. 4

August 22 and September 19: Frederick County Landfill, 9031 Reich's Ford RD

August 21 and September 18: Southern States Oakland Coop., 1862 Maryland Highway

August 9, September 6 and October 5: Martin's

Elevtor, 13219 Maugansville RD

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by the Maryland Cooperative Extension Service is implied.

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