



The Trillium

Piedmont Chapter
North American Rock Garden Society
Chapel Hill, Durham, Raleigh, NC

What's New? Great Plants for the Home Garden.

Bryce Lane

Home gardeners and plant enthusiasts are always looking for that great "new" plant. So much is being done by plant explorers, breeders and collectors to introduce new plants into the market. The adage "what is old becomes new, what is new becomes old" also pertains to gardening. There are many time tested plants that may be new to us, or they haven't been used in a long time that really represent a new approach or plant palette for our gardens. We should not forget to consider all our options. In addition, plants that are marginal in our local climate may be tried with some over-wintering success. For example, Colocasias and Alocasias, once thought to be exclusively Zone 8 are now having success making it through a central North Carolina winter... sounds like a new plant for my garden!



Photo by Bryce Lane

We so want to have the latest and greatest plant, we are often willing to accept new, but not necessarily improved plants. One should take care to research these new plants to make sure they live up to the hype they have been given. Just because they are newly discovered or developed, doesn't mean they are better than an older version. A catalogue or web site description doesn't always ring true when the plant is placed in our garden with our light exposure and our soil type.



Photo by Bryce Lane

There are some fantastic newly introduced plants for the home garden. New woody plants developed from years of plant breeding, created by research scientists at major universities like NC State. NC State Horticultural Science has released numerous newly developed plants, such as 'Merlot' and 'Ruby Falls' redbud. Be sure to look for plants that came from chance seedlings with unique characteristics that are now available for purchase. There are so many new herbaceous perennials and annuals to be

selected for our gardens. Herbaceous plants are so much easier to develop because of their short life cycles, and large corporate growers and marketers are working hard to offer new plants to meet this growing trend. The efforts of growers, scientists and enthusiasts make for an exciting time when it comes to new plants for our gardens. None the less, growing a tried and true plant that has been around for awhile for the first time can be equally rewarding... after all, it's all about the plants! 🌿



Photo by Bryce Lane

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Photo by Bryce Lane

Volunteers Needed: Packaging Seed for the NARGS Seed Exchange

Bobby J. Ward

The Piedmont Chapter of NARGS has been asked to give the NARGS Seed Exchange a hand this year, just as we did last December. The request—to assist with the packaging of donated seeds—has been agreed to by the chapter's board. The activity doesn't take a large commitment of time but it constitutes a major part of the Seed Exchange. Six to eight other NARGS chapters will also be assisting in the packaging.

Mark Weathington, assistant director of the JC Raulston Arboretum, has agreed to provide space for the seed packaging effort. Tim Alderton, at the JC Raulston Arboretum, and I have agreed to be co-captains for this chapter effort.

The seed are expected to arrive at the JCRA by the end of November and the packaging will be scheduled during early to mid-December. NARGS provides all the supplies, such as glassine envelopes, labels, and rubber bands. The work needs to be completed by the end of December.

A work schedule will be provided at the November rock garden meeting, by email, or upon request.

For further information and to volunteer to help, contact me at <biblio@nc.rr.com> or 919-302-4477 (mobile). 🌿

Thinking About Seeds ...

The reprint on the next page discussing seed germination is from the Manhattan Chapter newsletter. It will help you get set up and prepared for making the most of the experience on packing seeds. Of course, you have to be a member of NARGS and pay the usual modest price for the seeds you want, but you will have an early start on it. 🌿

Seed Germination Tips by Alan Bradshaw



Alan Bradshaw is the longtime proprietor of Alplains, a seed company that specializes in western U.S. flora, as well as seed from Japan, the European Alps, and other locations. Examine his website at www.alplains.com for his seed offerings and additional articles on seed culture and other topics. You can also request a catalog. Alan grows on a commercial scale, but most of his suggestions are perfectly adaptable to the average hobbyist. Consult his bibliography of seed growing for additional information sources.

Introduction: Why start plants from seed? Aside from the enormous satisfaction of seeing young plants develop to maturity, many more plants can be grown from seed than from practically any other method such as taking cuttings or splitting bulbs, etc. The possible exception is tissue culture, but this technique is beyond the typical hobbyist. Often, growing from seed is the *only* way to obtain valuable plants. Besides, seed-grown plants are genetically different individuals and thus can set more seed, unlike clonally-propagated plants. Germination failure often lies in the grower not knowing the exact requirements for a particular species and most seed lists don't give a clue how to sprout their seeds. Here at ALPLAINS, we constantly run germination tests on the seed we offer and distill that knowledge into codes that accompany every seed packet. Many other people and agencies also run germination tests and publish their results in various books, pamphlets, and websites, etc. which you are invited to study. Some of these are highly technical and may discourage the novice from getting started. If you are reluctant to grow plants from seed, feeling it seems too complicated or involved, then the goal of this article is to simplify seed-sprouting enough to give you the confidence to succeed.

Using only two basic techniques, called stratification and scarification, and various combinations thereof, you can sprout over 95% of seeds. These techniques apply just as well to Asian, European, and other seeds found on seed lists from the UK, Czech Republic, and Japan. There are plenty of challenging cases, to be sure, but just a little knowledge will allow you to sprout most seeds and greatly increase the variety of plants growing in your garden.

Sowing the Seed: Before discussing the techniques, you need to select a way to sow the seeds. Most hobbyists and commercial nurserymen have their favorite sowing medium/potting system. What's important is to sow seed indoors in a sterile medium in a protected area – sowing outdoors directly into the garden invites disappointment due to damage from insects, slugs, rot, and frost. It's true seeds sprout in their native habitat just fine, but nature produces seed in vast numbers in the hope that a few seedlings will survive to adulthood. We are more interested in obtaining the highest germination rate from our little seed packets. I use MetroMix 350, which consists of sphagnum peat, vermiculite, and a wetting agent. This sterile material will absorb moisture even when bone dry. I mix about four parts of the medium with one part fine perlite. I used to sow in obsolete 7 1/2" x 5 1/2" Styrofoam flats, but now I use 4" square plastic pots, fifteen of which fit in matching trays. I also use only 0.7mm pencil to mark the labels – the ink in those "permanent" markers fades after a year more or less.

Do you sow seeds on top or cover them? Many seeds require light to germinate, but most others don't care, and very few actually require darkness. I always sow on the surface, except for large seed like *Ipomoea*, *Paeonia*, *Sophora*, *Amsonia*, etc.

Flat seed like *Asclepias*, *Yucca*, and *Agave* are best inserted edge-wise into the mix. Some growers apply a thin layer of very fine granite sand on top to discourage algal growth and stabilize small seedlings, but I don't bother. You can always add more mix to stabilize spindly seedlings if necessary. I keep the flats or trays in 4' x 4' wooden "warm boxes" which have plastic roll-covers to keep moisture in. Heating cables provide bottom heat, which suffuses through an inch-thick layer of silica sand (30 sieve). Over each box is suspended a bank of five 4' fluorescent shop lights. Everybody develops their own system, but it's important to be able to control the temperature and light. Basic seed germination falls into three categories:

No Pre-Treatment: The absence of the requirement for either basic technique: All seeds must absorb moisture before germination can succeed. Once accomplished, seed sprouts in a relatively short period (days

Unfortunately, habitat is not an accurate predictor of seed germination type. The seeds of many alpine species come up easily with no pre-treatment, whereas many lowland species still need scarification. However, seeds of warm desert species generally sprout with no treatment, except perhaps scarification.

Other Techniques: If you are just beginning your adventures into the wonderful world of seed germination, I suggest you start with seed requiring no pre-treatment to gain confidence and to increase your skill in growing on the resultant seedlings into mature plants. Naturally, as your interest grows, you may want to learn about other techniques in seed germination to handle more challenging cases.

Probably the most useful of the minor techniques is Gibberellic Acid (GA3). Much has been written about this growth hormone. Most seed does NOT require treatment with this chemical and its use only results in dead seed or weak, spindly seedlings which quickly rot. The seed of some cacti, rosulate and sagebrush violets, *Glaucidium*, *Aquilegia jonesii*, and other calciphiles do indeed benefit from GA3 treatment, but if you are working on these examples, you have probably reached a level of sophistication that will help you achieve success. Since I have often been asked how to use GA3, I will outline my procedure here.

First, the seeds to be treated must absorb a solution of GA3. I never pre-mix GA3 with water because it does not keep long. Solid (powdered) GA3 keeps indefinitely and I mix it with water on the spot when needed. I use small glass 2 cc (cubic centimeter) vials (about an inch tall) with tight-fitting lids. I get these by the hundred, including the powdered GA3, from my local chemical supply house. I made a rack to hold the vials from a piece of particle board shelving by drilling a matrix of 1/2" deep holes on 2-inch centers. Masking tape between the rows allows for easy labeling. Every vial gets its own batch of seed to be treated and I then add an amount of GA3 that fits on the tip of a small chemist's spatula (equal to about several grains of salt). Using a dropper, I add warm water to half-fill the vials and let them stand overnight in a warm place. By the next day, the water will have absorbed the GA3 and the seeds will have absorbed the solution. It can stand for another day, but not after that, since rot usually sets in. Each vial then needs to be flushed out into a beaker and sown. Swirling the beaker while dumping the seed/solution mix onto the sowing medium takes some practice to equally distribute the seeds, but is the fastest way to complete the chore.

The seeds can be drained and dried *briefly*, but must be sown and watered immediately. The flats are then ready for further treatment (stratification). Using GA3, close to 100% germination results on *Viola beckwithii*, *V. trinervata*, and other sagebrush violets. Dry storage of some seed types (especially cacti) actually increases germination yield and decreases the necessity for GA3 because germination inhibitors are destroyed as the seed ages. For instance, after two years of dry storage, *Maibuenia poepigii* seed sprouts in a few days without the need for GA3. ❧

More information: 1) Deno, Norman. *Seed Germination Theory and Practice*. State College, Penn: self-published, 1993.

2) Emery, Dara E. *Seed Propagation of Native California Plants*. Santa Barbara, Cal: Santa Barbara Botanic Garden, 1988.

3) Loewer, H. Peter. *Seeds, The Definitive Guide to Growing, History, and Lore*. New York:Macmillan. 1995.4) ARGS/Denver Botanic Garden. *Rocky Mountain Alpines: Choice Rock Garden Plants of the Rocky Mountains in the Wild and in Your Garden*. Portland, Or: Timber Press, 1986.

2011-2012 Program Schedule, Piedmont Chapter NARGS

JC Raulston Arboretum —All Saturday programs begin at 9:30 a.m.

October 15, 2011

“New Plants Coming into Our Gardens”

Bryce H. Lane, Raleigh, N.C.

February 18, 2012

“Woodland Garden Plants—Part 2”

Suzanne Edney, Apex, N.C.

November 19, 2011

“Geo Whiz: Lesser Known Small Geophytes”

(tubers, bulbs, and corms) for the Southern Garden”

Tony Avent, Raleigh, N.C.

March 17, 2012

“One Writer's Garden: Eudora Welty's Home Place”

Susan Haltom, Ridgeland, Miss.

January 21, 2012

“Wildflowers Go Wild”

Betsy Pringle, Chapel Hill, N.C.

April 21, 2012

“Extra Dry, On the Rocks”

Charlie Kidder, Cary, N.C.

Signaling the Change of the Seasons...

Autumn Blooming Bulbs for Carolina Gardens

Edith Eddleman

Planting a bulb (corm, tuber, or the geophyte of your choice) is an act of faith in the future of an uncertain world. Enduring and surprising, its cycles of flower, leaf, and dormancy signal the changing of the seasons. For me, no change is as welcome as when summer slips into the cooler nights and shorter days of autumn, and it is safe to garden once again between the hours of eight and five.

Leucojum autumnale and *Scilla autumnalis* carry the season's promise in their names. Though both bloom here in July and August, their yearly appearance is a joyful reminder that autumn is not far away. *Leucojum autumnale* is a native of the western Mediterranean region. Its dainty white bell-shaped flowers dangle like tiny snowflakes suspended just three inches above earth's surface. Threadlike green leaves accompany the flower. Planted in patches of sandy humus on the south edge of my stone terrace, these bulbs feel right at home. At Montrose, Doug Ruhren planted a tiny blizzard of them among cyclamen at the base of a limbed-up *Cedrus deodara*.

Many years ago, I brought *Scilla autumnalis* home from England, and lost it in short order. It is native to Britain, areas of Southern Europe, and the Mediterranean region. Its eight-inch stems bear airy sprays of starry-lilac flowers which open in August. These are followed shortly by narrow grassy-green leaves. Thanks to Montrose Nursery, I have it once again in my garden, and now I find it easy to keep track of, planted against a background of chartreuse *Lysimachia nummularia* 'Aurea'.

Scilla scilloides grown from seed collected in Korea in 1986 by J.C. Raulston produces eighteen-inch wands of tiny mauve-pink flowers in July and August. Plant height and flower color are highly variable in this wide-ranging East Asian native; some forms flower at a height of just six inches. A prolific seeder, it naturalizes well in the garden.



Photo from the Alpine Garden Society

Scilla scilloides

border, the red *Lycoris* flowers are paired with the dark metallic bronze leaves of *Ajuga reptans* 'Atropurpurea' under the red-bracted blossoms of *Polygonum cuspidatum* 'Crimson Beauty' [now *Polygonum japonicum*]. Echoes, echoes everywhere.

The oxblood lily, *Rhodophiala advena*, brought to Texas from Chile by German settlers, is now naturalized there. When August or September rains (or the sprinkler) wake it from its summer sleep, it produces deep red, green-throated drooping trumpets on 15-18" stems. Blooming continues for a period of two to three weeks. The flowers last best if grown in partial shade. Oxblood lilies are dramatic against bronze *Ajuga*, black-foliaged *Ophiopogon* 'Ebony Knight', or green-foliaged ferns and Hostas. In my garden, they are equally beautiful with the hot colors of scarlet *Dahlia coccinea*, red *Salvia coccinea*, and orange *Zinnia linearis*, tempered by the narrow copper-bronze leaves of *Carex comans*.

Flowering onions add not only foliage fragrance but color and texture to the richness of the autumn garden. *Allium stellatum* flowers in August and September. This North American native has globe-shaped heads of starry pink flowers on 15" stems. In my garden their color repeats that of the Tennessee coneflower (*Echinacea tenesseeensis*) planted nearby. Another allium in my garden, *Allium thunbergii* 'Ozawas' from Japan, flowers in October and November. It grows 8" tall, with nar-

The broad arrowhead-shaped leaves of *Arum italicum* ssp. *italicum* have fascinated me since the first Thanksgiving when I discovered them growing in a raised bed of ivy (*Hedera helix*) beneath a giant maple tree in my Great-Aunt Edith's garden. The form, often sold as 'Pictum', has dark green leaves broadly veined with cream, which unfurl fresh and crisp when wakened by autumn rains, remaining beautiful throughout winter. A trick observed in Pam Harper's garden: interplant the summer-dormant arum with summer-flowering, winter-dormant *Begonia grandis*. In winter the dried begonia flowers look splendid with the fresh foliage of the arum.

In September *Lycoris radiata*, the fiery red Japanese spider lily, looks as superb as my grandmother grew it, rising out of a bed of periwinkle (*Vinca minor*) at the foot of red-berried, bronze-foliaged *Nandina domestica*. Doug Ruhren and I have planted it at the NCSU Arboretum through a swath of Japanese bloodgrass (*Imperata* 'Red Baron'). In the Arboretum's Elizabeth Lawrence Border,



Photo from ces.ncsu.edu

Lycoris radiata

row dark green foliage, and its numerous heads of red-violet flowers are beautiful when seen against the chartreuse, lime, and cream foliage of *Hypericum* 'Hidcote Variegated'.

Allium virgunculae, also native to Japan, is tiny---only 5" tall with grassy foliage. Its small nodding, red-violet bell-like flowers appear throughout October. A background underplanting of woolly gray-leaved 'Longwood' thyme shows off this small jewel without overwhelming it.

Oxalis bowiei from Cape Province, South Africa produces thick-substanced, bright green, clover-like leaves in autumn. Its blooms, 1-1/2" across, are a brilliant hot pink. It is an excellent companion to *Crocus speciosus*. Frost can interrupt its flowering, but when warm days return, new leaves and flowers continue to bring color to Indian summer's days. I first met this plant growing out of the ruined foundation of an old greenhouse in Durham, North Carolina, where its contractile roots had pulled the bulbs deep into the soil. Obviously, deep planting suits the cultural needs of this bulb.

x *Amarcrinum memoria-corsii* is also sold as x *Amarcrinum howardii* (Amaryllidaceae). It is a hybrid of *Amaryllis belladonna* and *Crinum moorei*. When Allen Lacy was reading Elizabeth Lawrence's manuscript for *A Rock Garden in the South*, he asked me if I thought there should be a section on crinums for the rock garden. I replied that their inclusion or exclusion depended upon the size of the rocks involved. Joking aside, for gardens which lack the space for the magnificent display of a five-foot-wide clump of crinums, x *Amarcrinum* offers a relatively dainty alternative. Two-foot-long, slightly pleated green leaves rise from its fist-sized bulb, and pink fragrant trumpet shaped flowers are produced throughout autumn. My clump was in bloom Thanksgiving week. This bold plant is a perfect foil in the autumn garden for shrubby lespedezas, asters, patrinias, *Liatris*, or *Eupatorium coelestinum*.

Crocus are my favorite autumn bulbs. Their flowers look like little spun-glass goblets set out by tiny garden spirits for a special party. In full sun or light shade, several autumn crocuses have persisted in my garden, growing in sandy acid soil.

Crocus speciosus, native from Eastern Europe to the Caucasus and Iran, is usually the first to bloom, with lavender blue flowers. They look best grown through a ground cover to support their long flower tubes. The delicate flowers are especially vulnerable to heavy autumn rains. But, since flowers are produced over a long period in September and October, they can always be counted upon for a good show.

October-blooming *Crocus goulimyi* from Southern Greece produces clusters of rounded lilac-pink flowers which when closed remind me of lollipops. I enjoy seeing these growing on a north-facing slope against a background of varied-leaved ivies, *Arum*, and *Rohdea*. *Crocus longiflorus* from Southern Italy and Sicily has lilac, fragrant (worth kneeling for) flowers with brilliant red branching stigmas. When grown through a carpet of narrow, black-leaved *Ophiopogon* 'Ebony Knight' beneath pink-flowered *Prunus subhirtella* 'Autumnalis', the crocus effect is lovely.

A native of Lebanon, *Crocus ochroleucus* flowers in November. Creamy white buds resembling glistening pearls rise through a carpet of red, orange and yellow fallen leaves from my crepe myrtle. *Crocus laevigatus* 'Fontenayi' has a lilac interior with deep violet stripes on the outside. It usually blooms by Thanksgiving, and continues to flower in the weeks approaching Christmas.

Crocus imperati from Western Italy is my Christmas crocus, given to me by Betty Wilson. Its flowers feature a tawny buff exterior feathered with violet, with a bright lilac interior. This crocus begins to bloom around the third week of December, just prior to winter's arrival. In my garden, early forms of a snowdrop (*Galanthus caucasicus*) bloom with it. Both are planted in front of a clump of *Arum italicum*.

By the first week of December, *Narcissus* 'Nylon', 'Taffeta', 'Tiffany' and 'Tarleton' are shaking out their hooped skirts in anticipation of a wintery garden ball. These smallhooped-petticoat narcissi (all Douglas Blanchard hybrids from crosses between *Narcissus romieuxii* and *N. cantabricus*) have thin green foliage, which appears at the same time as the flowers. Their flowers open a soft buttery-yellow, and fade to cream. They grow well in my sandy soil in sunny beds. Some are interplanted with small-flowered violet, yellow, cream, and blue-violet violas.

These last flowers of autumn are also the first flowers of winter. Soon they will be joined by the classic winter bloomers — crocus, snowdrops, and winter aconite — which sweep the Southern gardener into the new calendar year. ♡

Edith Eddleman gardens in Durham, NC. She is the co-designer, with Doug Rubren, of the J.C Ralston Arboretum's perennial border in Raleigh, NC. This article was printed originally in The Trillium in February 1995.



Photo from pvcnargs.org

Crocus goulimyi

Piedmont Chapter Meeting



JC Raulston Arboretum
Ruby McSwain Education Building

October 15, 2011 9:30 am

“What’s New?
Great Plants for the Home Garden”

Bryce H. Lane, Raleigh, N.C.

Followed by the Annual
Chapter Fall Plant Sale

The Trillium, Newsletter of the Piedmont Chapter
The North American Rock Garden Society
1422 Lake Pine Drive, Cary, NC 27511

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Sept. Plant Sale Manager: Kirtley Cox

Refreshments: Gwen and Maurice Farrier

Food Goodies to Share

If your last name begins with the
letter to the right), please consider
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Oct D-G

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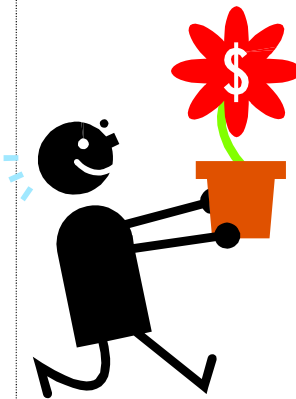
Feb N –So

April

March Sp—A

Any and all

Annual Chapter Annual Fall Plant Sale At the October 15 Meeting This Year



We count on you to make our chapter successful. The money from our plant sale and monthly auctions provide the funds for our speakers. Please contribute to this year’s success.

The annual meeting and plant sale will soon be upon us, so it’s time to get your contributions divided and potted up. Good plants of all sizes are needed. We encourage you to pot up your contributions early, so they will have some time to establish, rather than waiting until the day

before.

Bring plants in clean pots with each pot labeled. There is not time to make labels after they arrive that morning. Please have the labels complete, accurate and legible.

We will start setting up when the Arboretum opens at 9:00 am, and will eagerly accepting plants at anytime between then and the start of the sale. The program starts at 10am with the sale beginning immediately afterwards. Remember that contributors will lead the way at the start of the sale.

For more information, contact me at 919-489-7892 (H) or by email: [kirtley @ nc.rr.biz.com](mailto:kirtley@nc.rr.biz.com)