

Pot-in-Pot: From Concept to Reality — I

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INTRODUCTION

Midwest Groundcovers is a large wholesale container nursery located in the Midwest. We have a fully developed 160 acres in St. Charles, Illinois, and a partially developed 300 acres in Glenn, Michigan. We think of ourselves as leaders and trend setters in the American nursery market. We strive to stay one step ahead of the industry. This requires us to sometimes think outside the box. If we always do what we've done, we will always get what we've always gotten. With Midwest Groundcovers participating in such groups as the I.P.P.S., it truly helps us to seek and share information. By visiting other nurseries we are able to see systems in use that we presently don't use. On one visit to Lancaster Nursery we saw a system called pot-in-pot. This system is a hybrid between field nurseries and container nurseries. This is one concept that Midwest Groundcovers decided to explore. We took that information we saw and evaluated it to see: (1) Can and will it work in our system? (2) How can we adapt it to our system? (3) What are the costs of development? (4) What other considerations need to be looked at?

Once we decided to explore this pot-in-pot system the wheels started turning. We brought the information back and reviewed it determining how it could fit into the future of Midwest Groundcovers? There were numerous formal and informal meetings to gather input on the system. In the spring of 1998, we gave the green light to go ahead and build two trial pot-in-pot areas. We wanted to look at them to see what was the best way to construct and grow plants in these areas.

PREPARING AN AREA FOR THE POT-IN-POT SYSTEM

The construction process for Midwest starts a long time before the first trench is dug. During the winter the following preparations were made: (1) quotations for all supplies needed, (2) pre-ordered supplies that needed extra time to get, (3) determined what subcontractors were needed, (4) determined if existing structures needed to be moved, and (5) determined how many people were needed for the project and set-up deadlines for the project.

The beginning of the pot-in-pot project started with the removal of existing *Ajuga* stockbeds and 30-ft-tall *Juniperus* windbreaks. This was completed by a subcontractor using a Case track backhoe and a 20-yd Mack dump truck. Once all plant material was gone, the area had to be pitched for drainage. One problem encountered was that all four sides were bound by fixed grades. We had an overall width of 180 ft north to south and 500 ft east to west. The project had an existing stockbed on the east side, a forest on the south side, an existing road and drainage ditch on the north side and a property line on the west side. The trick was to grade it so it sloped from south to north and from east to west. This was accomplished with a John Deere grader, cutting and shaping the project in two cross directions. The reason why sloping the project was so important was because we had to use a drain tile under each pot in the project. The places we had seen pot-in-pot used elsewhere all had the advantage of very sandy soils, where drainage wasn't a problem. In our application, we had soils ranging from brown clay to loose loamy soil. Our soils hold water and we must get rid of it.

×*Pardancanda norrisii* ‘**Sangria**’ is an 18-inch plant with heavier, slightly twisted foliage and increased flower count and size. The flower color is an interesting blend of purples with a touch of gold in the sepals.

×*Pardancanda Dazzler Series* is a seedling strain very similar to ‘Sangria’ in plant and flowering habit. It grows 12 to 20 inches in height, with colors ranging from pinks with yellow margins, to darkest purples and near reds, very few with spotting. Another even smaller seedling strain is in the works.

Veronica ‘**Goodness Grows**’ is a release from Goodness Grows Nursery. Spikes of violet-blue flowers, 1 to 1½ ft tall, have an extended bloom season May through frost.

Stokesia laevis ‘**Mary Gregory**’ is a 2-ft plant loaded with 2-inch creamy-yellow flowers in mid summer. It is a Niche Gardens introduction.

Rudbeckia missouriensis (**Missouri black-eyed susan**) has 12-inch mounds of fuzzy foliage topped by bouquets of bright yellow flowers. Zone 6

Sambucus is a shrub that fits well into the perennial garden. The height can be reduced by cutting back the old canes in the early spring. Zone 4

Sambucus nigra ‘**Pulverulenta**’ has green foliage splashed with white specks, starting out nearly white in the spring.

Sambucus nigra ‘**Madonna**’ has bold golden margins, slightly shorter than typical *S. nigra*

Sambucus racemosa ‘**Plumosa Aurea**’ has finely cut leaflets that mature from bright yellow in the spring to lime green in the summer to yellow with a touch of bronze in the fall along with bright red berries.

Ipomoea batatas. There has been an increasing demand for tender perennials, especially the ornamental sweet potato, *I. batatas*. They make fast growing ground covers, and prefer the heat of summer to grow. Zone 10

‘Blacky’ has dark cut foliage to 10 inches tall ‘Margarita’ has chartreuse foliage, and ‘Pink Frost’ has white and green foliage with a violet-pink blush

Lysimachia punctata ‘**Alexanders**’ PP#10598 is a Plant Haven, England introduction. The 3-ft plants have cream-green variegated leaves that develop a pink blush during the cooler months of fall and spring. It has golden-yellow, star-shaped flowers in the leaf axils. Zone 5

Oenothera macrocarpa selection (possibly subsp. *oklahomensis*). This plant was found in central Oklahoma, it is vigorous and adaptable, and was found growing on an extremely poor site under drought conditions, but it was completely covered by large bright yellow flowers. Under normal garden soil conditions, it’s a little more open in habit allowing its unusual red stems to be even more obvious. Zone 4

Callirhoe alcaeoides ‘**Logan Calhoun**’ is 8 to 12 inches tall and up to 4 ft in diameter. This native plant is covered by sparkling white flowers throughout most of the summer, and is named in honor of the discoverer, the late Logan Calhoun. Zone 4

Due to the increasing interest in miniatures for troughs and rock gardens we are always looking for new “little jewels”. To determine the actual hardiness is very difficult since more are lost during the damp cool weather of fall and spring

Lewisia 'George Henley' is a typical alpine plant forming a 6-inch rosette of fleshy leaves with magenta-red flowers in midsummer. It is listed as a Zone 6 plant, but it has been persistent in my Zone 4b garden.

Drosanthemum hispidum is a close relative to the *Delosperma*, this miniature forms a dense clump of fleshy leaves covered nearly all summer long with purple-red flowers.

New and Usual Conifer Cultivars

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The term "new" is a relative one when dwarf or garden conifers are involved. When I use the term "new" it will mean popular or newly acquired by the trade, since collectors usually have this material long before it ever makes it into commercial production. Conifers for the garden can come from many sources. They can start from a graft of a witches broom, seed from a broom, a chance seedling, or a sport on a plant. The main thing to keep in mind when talking about dwarf conifers is the length of time something can be referred to as new. We all know of the work that Dr. Sidney Waxman has done at the University of Connecticut on broom seedlings. He has introduced many very nice landscape conifers to the industry. This takes quite a long time evaluating each plant to make sure it has a differing characteristic from the next one and then many more years to distribute to the trade, in some cases it can take 20 years or more. Many of these plants are first evaluated by collectors and shared or traded. Sometimes a selection can be around for many, many years before it is commercially accepted. So the word "new" is also being used as "collector new" and "industry new".

Which then brings up the classification of sizes. The American Conifer Society has established a guide to help eliminate the confusion around the term dwarf conifer. They actually prefer to use "garden conifer".

- **MINIATURE.** Grows less than 3 inches a year or will reach around 2 to 3 ft in 10 years. Example is *Chamaecyparis obtusa* 'Nana'.
- **DWARF.** Grows around 3 to 6 inches a year or will reach about 3 to 6 ft in 10 years. Example is *Pinus strobus* 'Blue Shag'.
- **INTERMEDIATE.** Will grow about 6 to 12 inches a year or will be about 6 to 15 ft in 10 years. Example is *Chamaecyparis pisifera* 'Gold Thread'.
- **LARGE.** Grows more than 12 inches a year and will be around 15 ft in 10 years. Example is *Cedrus atlantica* 'Glauca'.

Miniatures are perfect for the trough or patio garden since they will almost never outgrow the space allotted for them. Dwarfs are great in shallow borders or lower level foundation plantings. Intermediates will tend to outgrow the space if not used properly. Large should be used only as specimens or where plenty of room is given.

One thing to keep in mind when landscaping with conifers is to keep the growth rate in perspective. By using the proper plant in the correct location many years of enjoyment can be had.