# Shrubs are Perennials Too

Consider growing shrubs alongside your perennial programs.

# **BY PAUL PILON**

ver the past several years, many nurseries and greenhouses have added perennials into their product lines. However, there have been fewer nurseries adding annuals or greenhouses adding woody ornamentals to their product offerings. In this article, I'd like to focus on how traditional perennial growers and greenhouses could easily add shrubs into their programs; after all, shrubs are perennials too.

Before looking at how to add shrubs into an annual or perennial program, let's quickly look at the differences between herbaceous perennials and shrubs. Herbaceous perennials are plants that complete their life cycles in two or more years and typically lose their above-ground foliage in the winter. Shrubs, often referred to as woody ornamentals, are actually pretty similar to herbaceous perennials except they retain their wood stems during the winter.

I suspect many growers have this idea that shrubs have very long grow times and often require two or more years for plants to reach a marketable size. Although this may be true with some shrubs, many can be grown in one year or less much like the majority of the perennials growers produce.

### **GETTING STARTED**

Several shrubs are best to grow like a traditional perennial. This entails planting them in the summer or fall, over wintering and flushing them to a marketable size in the spring. The main purpose for starting certain shrubs the year before they are to be sold is to allow them time to bulk up. It's also not uncommon to plant in the late spring or early summer the year before the plants are to be sold when growing shrubs with slow growth rates or when producing them in large container sizes.

The other approach that works with numerous shrubs is to quick crop them or to plant them during the late winter or early spring the same season they will be sold. This option usually required an older, larger and more expensive liner, but greatly decreases production times, maintenance costs and decreases the risk of overwintering losses.



# Approximate Grow Times for 1-Gallon Containers When Spring Planting 3-Inch Liners

Shrub	Grow Time in Weeks	Shrub	Grow Time in Weeks
Abelia	11	Hypericum	13
Aronia	11	Ilex	13 to 15
Berberis	16	Juniperus	13
Betula	11	Lagerstroemia	9
Callicarpa	9	Ligustrum	11
Calycanthus	11	Lonicera	13
Caryopteris	9	Loropetalum	14 to 16
Cephalanthus	11	Lycium	9
Chamaecyparis	9	Parthenocissus	11
Clethra	13	Philadelphus	15
Coprosma	14	Physocarpus	13
Cornus	13 to 15	Potentila	11
Cotinus	11	Prunus	13
Cotoneaster	13	Rhamnus	13
Cytisus	11	Rhododendron	13 to 16
Deutzia	11	Rosa	10 to 12
Diervilla	9	Salix	12
Euonymus	13 to 15	Sambucus	9
Exochorda	13	Schizophragma	13
Forsythia	11	Spiraea	9
Fothergilla	14	Symphoricarpos	9
Genista	13	Syringa	13 to 15
Heptacodium	11	Taxus	16
Hibiscus syriacus	13	Thuja plicata	11 to 13
Hydrangea arborescens	9	Viburnum	11 to 15
Hydrangea paniculata	12 to 14	Vitex	11
Hydrangea serrata	9	Weigela	9 to 12
Hydrangea syriacus	12 to 15		

The actual grow times will depend on the species and cultivars being grown the actual size of the starting materials used and the production temperatures they are grown at.

Although some of the shrubs listed above may bloom, the grow times shown are generally the time it takes to produce a marketable plant.

There is a wide range of liner sizes available to use as starting materials. Since most shrubs are vegetatively propagated, it's rare to find starting materials smaller than 72-cell sized liners. Liner sizes commonly available range from 2-inch to 4 ½-inch liners or pots (40-cell cell trays to one-quart sized containers). It's also common to upgrade one quart to one gallon sized pots when planting two gallon or larger sized containers. Similar to perennials, many growers opt to use smaller liner sizes when summer or fall planting and larger sizes when quick cropping shrubs in the spring.

# **QUICK CROPPING SHRUBS**

When determining how much time to allow in the spring, the main considerations are the vigor or growth rate of the shrub, the size of the starting materials, the final container size and the production temperatures. When growing shrubs, consider each crop individually as one production protocol for every shrub will likely not be suitable for all of the varieties being produced.

Contrary to the idea that shrubs are long-term crops, many of them can be grown in surprisingly little time.

When considering which sized starting material is best, be sure to consider the number of grow weeks required before assuming a larger sized input is more costly. In many instances, larger inputs can be grown significantly faster and actually cost less to produce than when using smaller inputs, which require more production time and plant maintenance.

This should go without saying, but use larger-sized starting materials for finishing large containers. An alternate strategy can be to plant multiple smaller-sized liners into large container sizes. The choice to use small starting materials or the wrong number of inputs will require more production time, extra trims, decreased final plant quality and less profitability.

Plant vigor and production temperatures are the other considerations that greatly influences how much time a crop takes to grow. Several suppliers of starting materials have this information and make it available in their catalogs, on their websites or they will be happy to assist you with selecting shrubs that fit your production system and sales goals.

Contrary to the idea that shrubs are long-term crops, many of them can be grown in surprisingly little time. Take *Hydrangea serrata*, for example; it has a vigorous growth habit and can be grown in as little as nine weeks when 3-inch liners are planted into 1-gallon containers. Shrubs with average growth rates and vigor will take slightly longer and require approximately 12 weeks of production time. Numerous shrubs have a slow growth rate and will take at least 18 weeks of grow time to produce a finished one gallon container.

## **CULTURAL REQUIREMENTS**

Besides being woody ornamentals, shrubs aren't altogether different to produce than perennials. In fact, their cultural practices are fairly similar.

### VARIETY INFORMATION

Many growers prefer using "nursery" or bark-based growing mixes; this allows for longevity without the shrinkage commonly observed when using peat based growing mixes. I too find bark mixes beneficial for shrubs when they are being grown for several months or a year; however, peat based growing are suitable for many shrubs when they are being quick cropped or grown for less than three months.

Shrubs require similar or slightly higher fertility rates than most perennials do. When using a controlled-release fertilizer (CRF), I find most shrubs perform well when they are fertilized with a formulation that consistently releases approximately 0.25 pounds of elemental nitrogen for every month they are in production. Nutrients can also be provided using water soluble fertilizer by delivering around 150-ppm nitrogen with everyday irrigation. With both fertility approaches, be sure to provide micronutrients to help optimize growth and appearance while minimizing nutrient deficiencies. Maintaining pH levels around 6.0 is sufficient for most shrubs.

Most shrubs have average irrigation requirements. This means they should be kept relatively moist at all times while not allowing them to dry too far or keep consistently wet between irritation cycles. Be aware of the physical properties and water retention capacities of the growing mix and monitor and manage the irrigation practices accordingly. Shrubs can be grown in greenhouses, shade structures or directly outside. I usually observed nicer looking plants when they are grown outside or inside open roof structures. This results in more compact and fuller looking plants. Shrubs should be grown at wide spacings to keep them from growing upwards and have a 'stovepipe' appearance. Wide spacing also improves the air circulation around the plants and decreases the development of foliar diseases.

### **CONCLUSION**

I hope I've broken some of the misconceptions out there about shrubs taking at least a year to produce. Sure it's not a realistic expectation to finish a 5-gallon container using a 3-inch liner in a few months, but there are so many potential options for growing and marketing shrubs alongside their herbaceous counterparts. Shrubs can be easy to grow, quick cropped and grown profitably. Perhaps it's time to give them a chance; after all, shrubs are perennials too. QPD

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