# BARE ROOT PERENNIALS: EFFICIENT FOR GROWERS OF ALL SIZES

USING BARE ROOT DIVISIONS CONTINUES TO OFFER GROWERS MANY BENEFITS INCLUDING LOWER HEAT REQUIREMENTS AND FASTER PRODUCTION TIME. **By Paul Pilon**

Historically, bare root divisions were one of the main sources of starting materials for greenhouses and nurseries. With the popularity of plugs and liners in the past couple decades, some growers have reduced their dependency on bare root divisions and switched to other types of starter plants. However, many growers have recognized that it continues to be more advantageous to utilize bare root liners for particular crops.

## Benefits for Small Growers

Large growers typically purchase perennial liners in quantities of 72 or more individual plants per tray. This is often too many for small growers who may find themselves spending more money on liners and growing more finished plants than they need. A benefit for small growers in particular is that bare root starting materials are usually available in smaller minimum quantities.

Bare root perennials typically become available from wholesalers to ship in late summer and early fall. Logistically speaking, this is good timing for growers who can shift the transplanting of their perennial crops from spring to late summer or early fall when the workload is typically lighter and labor

*Some perennials are just better from bare root including the* Phlox paniculata *Flame series and heliopsis 'Tuscan Sun', shown here in field production at Walters Gardens, Inc. in West Michigan.*

is more readily available. Once established, many fall planted perennials can be overwintered directly outdoors with the appropriate amount of winter protection. When the plants are kept outside and emerge in the spring, they are more tolerant of natural temperature fluctuations. Perennials grown outside with natural temperatures are often of higher quality than plants grown inside structures.

## Benefits for Large Growers

Bare root perennials can usually be finished in less time than those started from plugs, with production times being an estimated 25 to 30 percent faster (up to 50 percent faster in some instances). This benefits large growers by giving them the ability to turn their production space faster, which could result in increased sales revenue over time.

***Top:*** *Bare root perennials like veronica 'Hocus Pocus' (shown) are less prone to damage in shipping since they are often dormant when sent.*
***Bottom:*** *Bare root divisions are the way to go with daylilies like 'Going Bananas' (shown). Large #1 divisions finish out 1-gallon containers in less than two months.*


### TIPS FOR TRANSPLANTING BARE ROOT PERENNIALS

- Pot up your bare root perennials as soon as possible starting with evergreen varieties such as iberis, lavandula and *Phlox subulata*. Next, pot up those with large, fibrous root systems such as achillea before they dry out. Lastly, pot up varieties with larger, fleshy roots such as hemerocallis.
- As a general rule, bare root perennials should be planted with their crown at the soil surface. Look for the mark left by the soil line on the crown to use as a guide.
- To encourage root development, fan or spread out the roots when they are transplanted. Do not fold or wad them up in a ball and shove them in the pot. Only trim the roots if absolutely necessary to fit in the container.
- After transplanting, water the plants thoroughly to reduce undesirable air pockets and ensure good contact between the roots and the growing mix.

*Look for the soil line on a plant's crown to know how deep to plant the root in the container. On this bare root hosta, the point where the color of the crown transitions from green to white indicates how deep it should be planted.*

Additionally, starting with bare root divisions gives growers more control over when their crops are in bloom. Large growers can stagger their potting dates to have plants in color over an extended sales window.

## Efficiencies for All Growers

Bare root perennials are commonly shipped from fall through early spring when it is not uncommon for temperatures to dip below freezing. Plug perennials are susceptible to cold injury during transit at this time of year if they are not dormant. However, bare root perennials are far less prone to injury during shipping which means less hassle and fewer claims for growers.

Bare root perennials typically are significantly larger than those grown in plug form. With their larger size, the plants have more vigor and quickly develop more shoots or branches than smaller sized plugs. Because they have better branching,

it generally is not necessary to pinch perennials grown from bare root, resulting in labor savings and reduced overall production time.

Bare root perennials can often be grown considerably cooler than plants started from smaller sized plugs. As a general rule, the highest quality perennials are grown slow and cool. These cooler temperatures benefit both the plants and the growers paying the heating bills.

## Where to Start

For growers who are new to or unsure about using bare root liners, start with easy perennials that are simple to grow. They will see tremendous results by starting with a bare root plant on some key genera listed below. For example, it's tough to fail with bare root hemerocallis, hibiscus, sedum and lavandula. As a rule of thumb, look for the mark left by the soil line on the crown and pot the roots up to that line in the container.

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**Ten Easy Perennials to Grow from Bare Root:**

1. Hibiscus Summerific series
2. Hemerocallis 'Going Bananas'
3. Sedum 'Maestro'
4. Achillea Seduction Series
5. Lavandula 'Essence Purple'
6. Veronica 'Hocus Pocus'
7. *Astilbe chinensis* Visions series
8. Perovskia a. 'Peek-A-Blue'
9. Hosta 'Francee'
10. *Amsonia hubrichtii*

Growers should seriously consider using bare root divisions to start many of the perennial items they are producing to obtain higher quality plants with improved value and marketability. Perennials started from bare root finish as larger plants with more eyes or branches per pot, often allowing growers to produce them in larger sized containers that sell at higher price points. High-quality crops, which can be produced with less labor, lower heat requirements and faster production times, benefit growers of all sizes.

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