

Plantline

April 2014

A Newsletter from Carlton Plants LLC

MALUS

A True Classic for our Landscapes

By Steve Carlson

Nature gives to every time and season some beauties of its own.

- Charles Dickens

Flowering crabs have been in existence for ages, starting with a few cultivars to over a thousand today. They were a food source in the 1700's when the European settlers came to America and now are a large part of our ornamental landscape. What other tree has so many shapes, sizes, flowers, berries and fall color than flowering crabs? When used in the correct location they provide a very attractive and beautiful enhancement to any landscape.



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Malus
A True Classic

Each spring, the show of colors these trees put on is outstanding as they bloom in a colorful range of whites, pinks and reds, singles or doubles. Many are also very fragrant. Summer foliage, depending on variety, can be chosen for its multiple shades of greens or reds with some changing to very attractive colors in the fall. Ornamental fruits of, red, burgundy and yellow add color in late fall and early winter to the landscape and are excellent for attracting birds to our yards. Some cultivars, such as Dolgo, produce fruit that can be used for making jams and sauces.

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Rootstocks for Flowering Crabs

Kankakee Nursery

The newer cultivars, introduced over the past few decades, have addressed many of the concerns associated with suckering, diseases and messy fruit. SproutFree® sucker resistant rootstock has reduced maintenance for the grower, landscaper and homeowner. There are now many disease resistant varieties with smaller persistent fruit available.

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Meet Jason Bizon
Our new Sales Manager

When choosing a flowering crab the first thing to consider is the space in which it will be planted. Especially nice for smaller yards, are the compact varieties.

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Coralburst and Lollipop are roughly 10 x 10' in size and make for great focal points in the landscape. Coralburst produces coral-pink flowers which transition to attractive bronze fruit along upward angling branches. In contrast, Lollipop is more umbrella shaped with white flowers and golden-amber fruit. Others in the compact form are Cinderella, Lancelot and Sargent Tina all with snow white flowers. Royal Gem has striking rose-red flowers, dark red fruit and foliage that changes from crimson red to a dark bronzy green as they mature. Firebird, a newer compact horizontal variety, has flowers that start out red to pink in bud and eventually open to very lovely white fragrant blossoms. It is appropriately named for its very attractive dense and persistent show of fiery red fruit in the dormant season. These are all grafted on a hardy interstem to produce a patio or small landscape sized tree.



Sargent Tina

Weeping forms are somewhat compact and can also be used in smaller areas. Malus Louisa, Red Jade, Royal Beauty and April Showers all have their own unique pendulous characteristics. They range from 6-10' wide by 8-20' tall. April Showers is a newer variety with branches that weep strongly downwards. They appear to be raining flowers when in bloom and create additional interest with their bright red fruit. This weeper is truly a gem.

Upright forms like Red Barron, Adirondack, Marilee, Pink Sparkles, Red

Jewel and Velvet Pillar grow only 10-12' wide and Emerald Spire widens to only 6'. They have a variety of flower and berry colors spanning from Red Barron, with deep red blossoms, to Emerald Spire with large double pink blooms. Emerald Spire is hardy to zone 2. There are many other upright varieties in the 15-20' spread range to choose from.

For larger landscapes there are countless cultivars available. Keeping placement in mind, many varieties have small persistent fruit that are not messy and will work well in parking lots or along a sidewalk or path. A few of the crabapples with persistent fruit are Donald Wyman, Adams, Firebird,



Royal Beauty

Indian Magic, Red Jewel, Snowdrift and Pink Sparkles. All of these have good disease resistance and a wide selection of ornamental attributes to choose from. Again, the persistent fruit is colorful and provides food for our feathered friends in the fall and winter.

There are little to no fruiting varieties as well. The best known is the sterile Springsnow which blankets itself with large white blossoms in the spring, appearing as if it was covered in snow. Marilee is upright and profusely blooms semi-double flowers starting out pink in bud and gradually opening to white. The pink blooming Velvet



Royal Raindrops



Prairifire fall color

Pillar and red flowering Cardinal are two additional fabulous, yet minimal fruiting varieties.

Many flowering crabs have a variety of leaf colors. Adams, Indian Summer, Profusion and Red Barron all have foliage that starts out burgundy or bronze and then transitioning to green. Adams, Donald Wyman, Indian Summer, Lancelot, Red Barron, Red Jewel and Bechtel produce an outstanding display of attractive autumnal foliage colors as well.

Many crabapples are produced in a multi-stem form. They can be planted to add texture and variety to a large landscape or median, used for hedgerows or shelter belts or planted simply as a single large, highly ornamental shrub.

When one considers all of the various flowering crab selections along with all of their incredibly attractive ornamental combinations; this old time classic can truly be planted in almost any landscape situation and be appreciated for its beauty and charms for many years to come.



Golden Raindrops



Red Jewel



Lancelot with hoarfrost

Rootstocks for Flowering Crabs

An Overview

By Joe Dixon

When it comes to selecting a rootstock to bud flowering crabs on, there are many to choose from. Following are ones that Carlton is very familiar with and has used or offered over the years:

Malus domestica At one time this was the most commonly used flowering crab rootstock in the industry. It is produced from seed that is a byproduct of apple juice production. The fruit that are used for large scale juicing commonly are any sweet apple variety that is in surplus in any given season. This can vary greatly from year to year so genetic variation regarding consistency is always a consideration. Seed is usually plentiful, inexpensive, and germinates well. However the one thing that always seems to be consistent is its tendency to sucker heavily. As a result, Carlton has moved away from using this rootstock.

Malus dolgo This rootstock has always been considered to be a strong USDA zone 2 hardy one. Nurseries in the coldest area have found that it readily shuts down and induces early dormancy, thus avoiding early freeze damage. It is a vigorous full size producing

rootstock and will sucker but not as much as *Malus domestica*. Carlton does produce a limited number of flowering crabs on this rootstock for customers where a minimum of zone 2 hardiness is of the utmost importance. However, seed from the Dolgo crabapple is very sparse and unreliable from year to year so consistent availability can be an issue.

Malus Columbia This rootstock, according to zone 2 nurserymen, is every bit as hardy as Dolgo. Also, according to northern growers, who have experience with it, Columbia bud takes are excellent. Carlton will use this rootstock as a hardy alternative for Dolgo seedlings. Like Dolgo, suckering with Columbia will still be a consideration to contend with.



Layer Beds

M-111 This is a semi-

Kankakee Nursery

By Tim Wommack

“Necessity Really is the Mother of Invention”

Although it isn't often that a nurseryman quotes the philosopher Plato, but “*necessity is the mother of invention*” seems appropriate in describing the problem-solving approach undertaken by family-owned Kankakee Nursery several years ago. Kankakee needed a way to mechanically and selectively harvest shrubs grown in their 48” row spacing.



Although this spacing is a more effective use of space on the nursery, it comes with an additional set of headaches that Kankakee needed to solve.

Tighter row spacing makes it difficult to thin the blocks since plant access is more limited and mechanized options were limited. “We needed to find a way to get a mechanized spade through the B&B shrub blocks,” said Dick Worth, production manager at the 90-year-old nursery. Previous methods were neither efficient nor economical. After investigating numerous options they borrowed an idea from the many seed-corn hybridizers throughout the state of Illinois.

Their solution was based on using the Pro-line model 640 tractor designed by Big John Manufacturing in Osmond, NE. Originally designed as a corn de-tassler, the “high profile” machine allows them to move over the top of the plants. This particular model is designed with over 6’ of clearance. “We removed the de-tasseling apparatus and mounted a small spade,” Worth said. “This allowed us to maneuver the spade into place from above. We were able to selectively dig plants out of the middle of the rows without tearing up our fields or the surrounding plants.” Although this machine solved one problem, it created another dilemma. What do you do with a \$90,000

standard clonal rootstock grown from layer beds. It is much less suckering than the rootstocks aforementioned. It does produce a tree that will be smaller than flowering crabs grown on standard rootstocks. It is hardy to zone 4. Carlton does not grow crab varieties on this rootstock but grows and makes it available for Sales to both orchard and ornamental nurseries.

Malus SproutFree® This clonal rootstock, grown from layer beds, is Carlton Plants first choice for budding the lion's share of the flowering crab varieties produced here. As the name denotes, it was selected (after two decades of trialing) for its minimal suckering attribute. The benefits of this are many and obvious, but foremost it saves the costly annual expense of sucker eradication for both growers and landscape maintenance companies year after year. This rootstock is hardy to zone 3. Fertilization and



Malus Grafts on SproutFree®

excessive irrigation after mid-summer should be avoided. It does take more effort to produce this rootstock from layer beds and requires a little more extra care and handling than those grown from seed, but the non-suckering attribute derived, ends up being a benefit that makes the production of flowering crabs on SproutFree®, a choice that is of great value to our industry and for use in our landscapes.

With the exception of Columbia, Carlton currently grows the above Malus rootstocks for sale to the commercial fruit tree industry and to ornamental nurseries. Other Malus rootstocks that Carlton produces for sale are M9-NIC29, M9-337, M26, M7, and M-106. Call your Carlton Plants' sales rep for an availability.



Layer Beds

machine when you are not digging shrubs or trees? According to Worth, "It was a pretty large investment with a somewhat limited range of use." That was when Jeff Franklin, Weed & Pest Control manager, looked at how they utilized their equipment for the herbicide program and came up with an additional use for the Pro-line.

Kankakee had been considering different options for mounting their Bubbco Enviromist spray apparatus. Their shop manager suggested ways to retrofit the Pro-line tractor. A 50-gallon tank was mounted on the machine, the tree spade was replaced with the "Enviromist" sprayer and they were in business. With over 1,100 acres in production, Kankakee is a multi-faceted nursery operation, with an extremely broad mix of product types. "We do a lot of different things here," says Worth. As a grower of over 500 species of trees and shrubs –balled-and-burlaped, Pot-n-Pot, as well as bareroot – weed control can be a constant challenge. "We have to be as efficient as possible, and we mechanize whenever we can." With the Enviromist mounted in the front, the Pro-line can move over the tops of the shrubs and evergreens, through the bareroot product, and around the large caliper-sized tree fields, adjusting the spacing as needed. "Our operator can fill up in the morning and run all day," says Worth. The Pro-line has turned out to be a great long-term investment for the family-owned Kankakee. "It's not often



that we can find equipment that will work in virtually all areas of our production. It has saved us countless man hours over the years," says Worth, a third-generation family member. What lies ahead for Kankakee? The nursery is looking forward to continued growth as it enters a second century of business with help from a fourth generation of family nurserymen. A new generation who are learning, first-hand, that in their business, necessity really is the mother of invention.

WHAT'S NEW?

2015 NEW VARIETIES

Trees:

Acer truncatum Main Street®
 Carpinus caroliniana Firespire™
 Cercis canadensis 'Appalachian Red'
 Cercis canadensis 'Pink Heartbreaker'
 Gleditsia triacanthos Street Keeper®
 Halesia carolina 'Jersey Belle'
 Malus Emerald Spire®
 Malus Starlite®
 Quercus palustris Green Pillar®
 Styrax obassia Fragrant Snowbell
 Ulmus americana 'Jefferson'

Shrubs:

Berberis thunbergii Golden Ruby™
 Buddleia Flutterby Grande® Peach Cobbler
 Buddleia Flutterby Grande® Vanilla
 Cercis canadensis 'Appalachian Red'
 Hamamelis vernalis Autumn Embers™
 Hydrangea macrophylla Next Generation
 Pistachio
 Hydrangea macrophylla Star Gazer
 Hydrangea paniculata Sweet Summer
 Hypericum kalmianum 'Blue Velvet'
 Sambucus Black Tower

Small Fruits:

Blueberry
 'Jersey'
 'Pink Lemonade'
 'Sunshine Blue'

Rootstocks & Seedlings

M9-337



Acer truncatum Main Street



Acer truncatum Main Street



Berberis Golden Ruby



Buddleia Peach Cobbler



Carpinus Firespire



Hamamelis Autumn Embers



*Blueberry
Pink Lemonade*



Hydrangea Star Gazer



Hydrangea Pistachio



Vaccinium Sunshine Blue



Hydrangea Sweet Summer



Sambucus Black Tower



Ulmus Jefferson



Buddleia Vanilla



Vaccinium Jersey



*Styrax Fragrant
Snowbell*

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MEET JASON BIZON



Greetings;

I hope your spring is off to a successful start and that we can finally say we have turned the economic corner in the green industry. Many challenges still lay ahead but optimism seems to be the mantra of the day. I'm Jason Bizon, the Sales Manager at Carlton Plants. After working on the production teams the last 10 years I have excitedly accepted this position in sales. I look forward to meeting and working with each of Carlton Plants present and future customers.

I can be reached by email at jbizon@carltonplants.com or by phone at (503) 868-7971. I look forward to seeing or hearing from you soon.

Jason



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