

Plantline

April 2011

A Newsletter from Carlton Plants LLC

PURPLE LEAFED PLANTS FOR THE GARDEN AND LANDSCAPE

— by Joe Dixon

The Coolers are running!

For last minute plant needs contact your sales representative or our main office for availability.

Our coolers run until the first of June.

Rootstocks and shrubs can easily be shipped UPS.

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Carlton Field Reps
Did You Know?

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New Varieties for 2011

Trees

- Caragana arborescens 'Sutherland'
- Cercis canadensis 'Royal White'
- Hamamelis x intermedia 'Barmstedt Gold'
- Hamamelis x intermedia 'Rubin'
- Maackia amurensis 'Starburst' (P.P. 10557)
- Quercus robur fastigiata x bicolor Kindred Spirit® (P.P. 17604)
- Syringa patula 'Miss Kim'
- Ulmus glabra (Complex Hybrids) x 'Patriot'
- Wisteria frutescens 'Amethyst Falls'



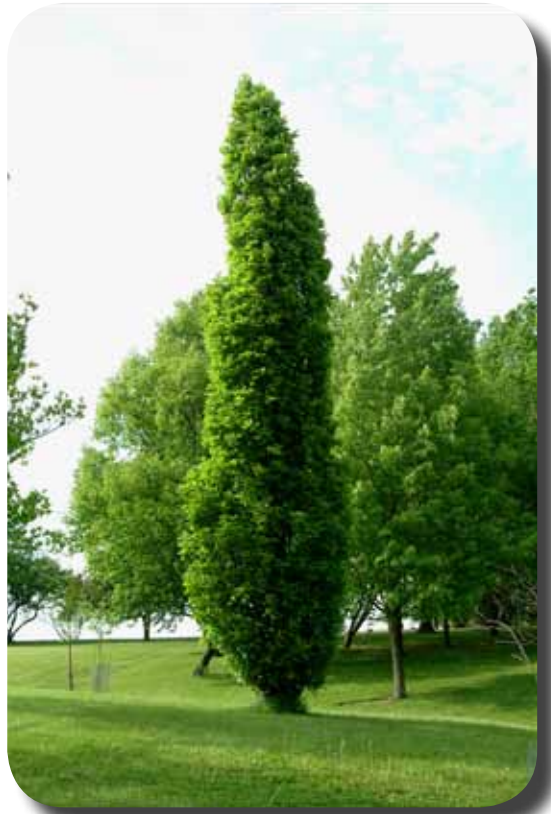
Hamamelis x intermedia 'Barmstedt Gold'



Hamamelis x intermedia 'Rubin'



Cercis canadensis 'Royal White'



Quercus robur fastigiata x bicolor Kindred Spirit®

Photo compliments of Earl Cully

Shrubs

- Cercis candensis 'Forest Pansy'
- Cercis canadensis 'Royal White'
- Hamamelis x intermedia 'Barmstedt Gold'
- Hamamelis x intermedia 'Rubin'



Although we tout ourselves to be a "Green Industry", we sometimes forget that we are truly an industry of many vibrant colors. The term "Rainbow Industry" might be more appropriate. When it comes to summer foliage of deciduous trees and shrubs we are fortunate to have many varieties in various shades of red and purple with which to add dynamic interest to our green landscapes.

Botanically speaking anthocyanin is the pigment responsible for creating purple and red foliage in both the summer and fall. For many plants this pigment, for reasons unknown, locks in purple coloration throughout spring and summer with many different transitional variations. Why some trees turn from different shades of green to purple and vice versa in spring and summer is one of the wonderful mysteries of horticulture. This phenomenon, however it is explained, works to our benefit in adding a colorful reddish purple dimension to our summertime "Greenscapes".

There are approximately 40 different varieties of trees and 20 shrubs that Carlton grows which exhibit summertime shades of red and purple. The ranges extend from the deep dark purples of 'Krauter Vesuvius' plum to the light reddish green tint found in 'Sensation' box elder. I personally enjoy the display of both green and purple foliage on the same branch that is produced by 'Red Select' chokecherry in the spring as it leafs out. Many flowering crabs have bronzy reddish green foliage that stands out in the summertime. 'Royal Burgundy' flowering cherry with its rich purple foliage and deep double pink bloom is outrageously striking in mid spring. 'Royal Frost' birch provides a very eye catching contrast between its purple foliage and creamy white exfoliating bark.

In the way of shrubs, the reddish purple Physocarpus varieties give us a richness of colors to choose from. A mix of both the purple leafed 'Diabolo' and gold leafed 'Darts Gold' makes for a dazzling display in a garden center. The deep purples of Cotinus also are most striking. They can vary slightly from year to year depending on the growing season. The amount of light and shade exposure to some purple varieties can determine how deep the hue develops.

The key is to select a range of purple to red varieties to offer your customers each year and strategically display these varieties so that they compliment, stand out, and enhance the beauty and attractiveness of your nursery.

Did You Know?

Purple.....

The color purple has always been associated with Royalty. Royal or Tyrian (from Tyre) purple were mentioned in texts dating from 1600 BC. Only the most expensive dyes were used to produce the color purple, therefore symbolizing wealth and power. The Phoenicians crushed thousands of seashells called purpura to make the dye that was worth more than its weight in gold. The dye itself was later known as purpura. The base of the botanical Latin term for purple is "purpurea" from the purpura shells the Tyrians harvested.

When the air is humid, rain is more likely at low than at high tide. Falling tide reduces atmospheric pressure.



Leaves show backs before rain. They grow according to prevailing wind; a change of wind turns them over.



High visibility over salt water means rain is on the way. Salty haze is dispelled by unstable air currents.



Lightning in west or northwest usually is in a storm that will reach you. Storms to the south or east go past.



Dew on grass at night or in early morning is a sign of fair weather. It forms only when air is dry, skies are clear.

When distant sounds are loud and hollow, look for rain. Lowering cloud ceiling acts like a sounding board.

Conservation Corner

FRUIT TREE POLLINATION BASICS

— by Travis Orback

Bloom Times



It's essential to choose varieties with similar or overlapping bloom periods. Fruit trees are usually designated as early, middle or late. For example, two different cultivars within any bloom period would be ideal. In addition, any cultivars within early and middle or middle and late periods would be okay.

Pollinators and Pollinizers

Sometimes these two words are used interchangeably but they have different meanings. A pollinator is any agent that participates in pollen transfer such as insects, birds, man, etc. The honey bee is an excellent pollinator of apple trees. A pollinizer is the source of the pollen or where the pollinator gathers the pollen. Granny Smith fruiting apple is an excellent pollinizer for Yellow or Golden Delicious fruiting apple.

Self-fertility, Self-sterility and Cross-pollination

An understanding of these terms is necessary when choosing what to plant or offer your customers. A self-fertile fruit tree, such as Montmorency fruiting cherry, will always bear fruit by itself and will bear more fruit when cross-pollinated. A self-sterile tree will set little fruit on its own and needs to be cross-pollinated for abundant fruit set. Cross-pollination occurs when a different, compatible cultivar is used as a pollinizer but also occurs with at least two self-fertile trees.

Other Considerations

- Choose varieties that will offer a staggered ripening sequence
- Choose varieties with rootstocks that bring the tree into fruiting at an earlier age (precocity)
- Choose varieties with bloom times that avoid cool weather and frosts
- Space trees with allowances for room to grow and easy access for pollinators

Arbor Day

The first Arbor Day took place on April 10, 1872 in Nebraska, thought up by a journalist/politician named Julius Sterling Morton. Morton felt Nebraska's landscape and economy would benefit from a wide scale planting of trees.

More than one million trees were planted on that day. The state of Nebraska made it a legal holiday in 1885 on April 22nd – Morton's birthday.

The idea spread and now all 50 states celebrate Arbor Day on assorted dates keeping with their local climate.

In 1970 President Richard Nixon proclaimed the last Friday in April as National Arbor Day.

Variations of Arbor Day are now celebrated in many other countries.

These special days are dedicated to tree planting and increased awareness of the importance of trees.



Herbicide Sensitivity of Plants



— by Allan Elliot

The nursery industry makes its living by recognizing and promoting the specific and distinct characteristics of various plant materials. We are quick to point out the details of leaves, flowers, bark, growth habit and hardiness. As growers, we recognize the need to cater to the specific needs of various plants in order to achieve optimal growth and quality.

We adjust pH, temperature, soil, moisture, nutrition, pruning and propagation regimes to suit each variety. Then why would we think that one or two herbicides would work with all varieties?

Thirty years of bareroot production with over 600 varieties of trees, shrubs and rootstocks has given me a healthy respect for the use of herbicides. Their impact on plant performance cannot be taken lightly or assumed.

More times than not, one or two chemicals (herbicides) are being used repetitively during the year and over the life of the crop. Just as concerning is the willingness to apply new herbicides on a large scale just because the genus and species are listed on the label. Each variety within that genus, species is "genetically" different as exhibited by the characteristics for which it is being grown. As a result, each distinct variety can react differently to the same chemical.

Herbicide sensitivity can be exhibited in numerous ways that range from the subtle to extreme and bizarre. Leaves and stems can discolor, mottle, twist, burn or distort. Trunks, particularly green barked, can burn, discolor and become cankerous and necrotic. They can also absorb chemicals and translocate to leaves and terminals. Some herbicides reduce root growth and structure. Overall, growth of plants can be slowed and even stunted. Needless to say, this is not compatible with rigid crop schedules or quality plant material.

General comments:

Utilize caution with any herbicide. Just because it is on the label or of the same genus, species does not insure safety. Trial the chemical on a limited scale. Timing of the application can have a profound impact on results. Emerging buds and new spring growth are much more sensitive than late year mature foliage or dormant stems. Even morning dew on foliage can create issues with granular formulations. Climatic conditions related to heat, humidity, and dry wind can affect sensitivity. Delayed reactions can occur where the plant doesn't show reaction to a fall application until the following spring and summer's growth. Some chemicals are not applicable at planting, whereas they are safe once the soil has firmed and the plant is rooted. Repeated applications of the same chemicals can lead to the build up of these chemicals in the soil and tolerance by the weeds to the chemicals.

Specifics:

There are specific genres of plants that exhibit sensitivity to herbicides regardless of species or variety. Some are sensitive to a wide range of chemicals, where others are quite specific. The following should be on your watch list for being cautious.

Hydrangea is very herbicide sensitive to a wide range of chemicals of various formulations and application timings.

Euonymus alatus & compacta – do not apply Gallery or Pennant. This can result in permanent stunting.

Buddleia – no Gallery, particularly at planting.

Viburnum & Rhamnus – no Casoron

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Acer platanoides varieties – Surflan and related chemistry will reduce root development.

Tilia – Of all of the trees, Lindens are the most sensitive. Many chemicals can and will burn, discolor, or distort foliage as a result of direct or indirect contact with herbicides. Factor and Pendulum can stunt growth and Casoron and Simazine will cause foliar problems.

Other plants that can be impacted by various herbicides are: Cornus, Ilex, Itea, Deutzia, Philadelphus, Syringa and Berberis.

Concentrated levels of Glyphosate (Roundup) can be absorbed through the trunk or tree suckers and translocate into foliage inhibiting growth of young trees.

Just like people with allergies to food and medicines, plants have their individual genetic makeup that can cause them to be susceptible to the chemicals we apply to them. Herbicides are an area where caution and attention to detail will keep you and your plants in good condition.



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Summertime Shades of Red and Purple

Trees

Acer platanoides 'Crimson King'
Acer platanoides 'Crimson Sentry'
Acer platanoides 'Deborah'
Acer platanoides 'Royal Red'
Betula Royal Frost®
Catalpa x erubescens 'Purpurea'
Cercidiphyllum japonicum Red Fox
Cercis canadensis 'Forest Pansy'
Corylus avellana 'Fusco-rubra'
Cotinus coggygria x 'Grace'
Cotinus coggygria 'Royal Purple'
Cotinus coggygria 'Velvet Cloak'
Malus 'Prairifire'
Malus 'Purple Prince'
Malus 'Royal Beauty'
Malus Royal Gem™
Malus Royal Raindrops®

Malus 'Royalty'
Malus Showtime™
Malus 'Thunderchild'
Malus Velvet Pillar™
Parrotia Ruby Vase®
Physocarpus opul. Center Glow®
Physocarpus opul. Diabolo®
Physocarpus opul. Summer Wine®
Prunus 'Royal Burgundy'
Prunus Crimson Pointe®
Prunus 'Krauter Vesuvius'
Prunus Mt. St. Helens®
Prunus 'Newport'
Prunus 'Thundercloud'
Prunus padus Merlot™
Prunus virginiana 'Red Select'
Prunus x cistena

Shrubs

Berberis thunbergii atropurpurea
Berberis thunbergii 'Crimson Pygmy'
Berberis thunbergii 'Helmond Pillar'
Berberis thunbergii 'Rose Glow'
Cercis canadensis 'Forest Pansy'
Cotinus coggygria 'Purple Surpreme'
Cotinus coggygria 'Royal Purple'
Parrotia Ruby Vase®
Physocarpus opul. Center Glow®

Physocarpus opul. Diabolo®
Physocarpus opul. Summer Wine®
Prunus Crimson Pointe®
Prunus virginiana 'Red Select'
Prunus x cistena
Rosa rubrifolia
Sambucus nigra Black Beauty™
Weigela florida Wine and Roses®