

Flowering quince (Chaenomeles japonica), is dramatic in flower and can also produce fruit, used in jam-making.

Photo: Helen Battersby



'When in flower in late Spring or early Summer, beautybush (Kolkwitzia amablis) lives up to its name.

Photo: Helen Battersby

Ornamental Shrubs for Various Light Conditions : A Toronto Master Gardeners Guide

Shrubs are woody perennials that produce multiple stems, shoots and branches from the base of the plant. Generally, they survive winter without dying back to the ground as herbaceous perennials do, although there are a few exceptions. There is no clear distinction between a shrub and a tree; a shrub is usually low growing and multi stemmed, but it can also be single stemmed, like a tree.

Shrubs have no defined maximum height. In this gardening guide, the recommended shrubs range in height from 2 ft (60cm) to 10 ft (3m), like a sunny site and are deciduous, meaning they shed their leaves in the fall.

Considerations Related to Choice

When selecting a shrub, it is important to check that it is hardy in our climate; the hardiness zone, usually located on the plant's tag, indicates the minimum winter temperature the shrub can tolerate. Choosing plants suited to the growing conditions of your site, is always preferable to changing the conditions of the site to suit the plant. Conditions to take into consideration are the amount of sun/shade, acidity or alkalinity of the soil, whether the soil is primarily clay, loam or sand and proximity of other plants and associated root competition.

Another important, but often missed consideration, is the shrub's size at maturity. Checking mature height and width will tell you the amount of space the shrub will need for optimum growth.

Location

Since our focus is on ornamental shrubs for sun, it is important to look at how light conditions are classified. Most shrubs adapt well to either sun or shade; however, some may produce fewer flowers in a shady location.

Full sun plants require at least 6 hours of direct, late-morning/afternoon sun. Partial shade plants need a minimum of 4 hours of morning or afternoon sun, but should be shaded from the hot, midday sun. Full shade plants can thrive with less than 4 hours of sun. A bright location that receives no direct sun would be classified as full shade.

Uses

Shrubs may be used in foundation plantings, hedges, shrub borders, rock gardens, as specimen plants, groundcovers and in mixed borders with perennials.

In addition to their growth habit (height, width, form), shrubs are chosen for characteristics, such as:

- Foliage (colour, form, texture)
- Flowers, fragrance
- Attract wildlife, birds and insects for food source, habitat, nesting material.
- Fall interest with fruit or berries and colourful foliage.
- Winter interest through bark, structure or form.

Maintenance

Once established, shrubs require very low maintenance. They need to be watered regularly when first planted and in times of drought. If the plants are provided with a top-dressing of well-rotted manure or compost yearly, shrubs that are well suited to their locations will have its basic requirements for growth met.

Individual moisture and nutrient requirements will vary from one shrub to another.

Pruning

Shrubs are pruned for many reasons, including shaping, reducing size, removal of broken and diseased branches, thinning, rejuvenation and increasing flower and fruit production. The most common mistake made when pruning flowering shrubs, is pruning at the wrong time. It is always advisable to find out the exact pruning requirements because there are variations within the same family of shrubs.

Flowering shrubs fall into two groups. The first group blooms on new wood and produces flowers on this year's growth. These are the late flowering shrubs, like hydrangeas, and should be pruned in late fall or early spring, before growth begins. The second group blooms on old wood produced the previous season. These are the early bloomers, like forsythia, and should be pruned immediately after flowering. These shrubs will produce new growth during the rest of the growing season.

Deadheading (the removal of spent flowers) is a form of pruning. Shrubs, such as lilacs, benefit from deadheading, because this process will help the plant put more of its energy into growth, rather than seed formation.

Pruning should be avoided in late fall, to allow cuts to heal over and prevent winter dieback. Spring pruning can be performed as soon as the temperatures rise around the freezing mark and are guaranteed not to plunge dramatically.

Pests and Diseases

Shrubs, in general, are easy to grow and have fewer insect and disease problems than many other plants. Common pests, such as aphids, leafminers, caterpillars, beetles, borers or scale may attack. The viburnum family, is often the most seriously damaged by insects each year.

The Viburnum Leaf Beetle quickly skeletonizes the foliage of any viburnum it attacks; two of the most popular varieties, the Fragrant Snowball Viburnum and the Highbush Cranberry are its usual targets. This beetle was introduced from Europe in 1996, and it has no natural predators in Canada.

Fungal diseases, such as verticillium wilt, anthracnose or cankers can infect dogwoods, and honeysuckles and lilacs are prone to powdery mildew.

Organic Management/Control Strategies

Integrated Pest Management (IPM) is an approach to gardening, where different methods of control are selected and used in combination, in order to treat plant problems effectively and in an environmentally responsible manner. This approach can be used in the care of ornamental shrubs.

IPM uses four general control methods:



The pendant flowers of Japanese barberry (Berberis japonica) are a magnet for bees. They produce bright red berrylike fruit that can persist into winter.

Photo: Helen Battersby



Dappled willow (Salix integra) has attractive variegated foliage that can light up the garden.

Photo: Helen Battersby

Integrated Pest Management:

Sanitation

Good sanitation practices are important. Esthetics aside, a tidy garden is generally not a desirable environment for pests and disease. Weeds and plant debris provide shelter for insect eggs, as well as food for larvae and adult insects that may host a variety of pathogens. For these reasons it is important to clean up decaying plant material and remove any weeds as they appear and before they set seed.

Diseased plant material (including infected deciduous leaves shed in the fall) should be removed and disposed of in the garbage, never composted.

Pruning out diseased branches promptly and proper sterilization of your work tools will also help to eliminate or minimize the spread of disease.

Cultural Methods

The principle behind cultural controls is that a healthy plant is far more likely to be able to withstand disease and pest problems than a plant that is under stress.

Begin by selecting plants that are well suited to the existing growing conditions of your site; native plants are frequently a good choice. Look for disease-resistant varieties. When planting, prepare the soil well and give your plants plenty of space to grow. Over-crowded plants become stressed trying to compete with neighbouring plants for light, nutrients and moisture and are more susceptible to disease, due to poor air circulation. Make sure that your plants are watered deeply when needed. Mulching will help reduce the need for watering and weeding. Do not over-fertilize. Soil amendments such as compost, bonemeal and manure applied in the growing season help to reduce the need for chemical fertilizers. Closely monitor all plants for any signs of disease or pest problems.



There are many effective non-chemical methods of controlling insects. Some examples are:

- Spray infested plants with water, to wash off aphids and spider mites.
- · Handpick and destroy insects, such as potato and lily beetles.
- Use insecticidal soaps to control insects such as aphids, spider mites, thrips and scale.
- Traps may be used for slugs, snails and earwigs.
- Physical barriers, such as plant collars, act as deterrents to cutworms

Biological Controls

Insects have predators, parasites and pathogens as natural enemies. Biological control takes advantage of this fact. Some beneficial insects are predators to other damaging insects. These include ladybugs and lacewings, which feed on aphids, scales, mealybugs and mites, and parasitic wasps, which feed on aphids, whiteflies and caterpillars. Many of these beneficial insects can be purchased at garden centers for use as a natural insect control.

Creating a natural habitat in your garden will encourage wildlife such as birds, toads, and snakes that feed on insects. Creating such habitats is another form of



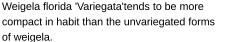
Golden ninebark (Physocarpus opulifolius 'Dart's Gold) is just one of the colour variations of this useful shrub. Ninebark gets its name from the peeling bark that a touch of interest to the Winter landscape.

Photo: Helen Battersby

Reccomended species/varieties/cultivars

Ornamental Shrubs for Full Sun

- Berberis thunbergii (Barberry)
- Buddleia davidii (Butterfly bush)
- Chaenomeles japonica (Japanese Quince)
- Cotinus coggygria 'Royal Purple' (Royal Purple Smoketree)
- Cotinus coggygria 'Young Lady' (Young Lady Smoketree)
- Cotoneaster acutifolius (Peking Cotoneaster)
- Cotoneaster apiculatus (Cranberry Cotoneaster)
- Cotoneaster horizontalis (Rockspray Cotoneaster)
- Cotoneaster perpusillus (Dwarf Rockspray Cotoneaster)
- Deutzia gracilis 'Nikko' (Nikko Slender Deutzia)
- Deutzia lemoinei 'Compacta' (Compact Lemoine Deutzia)
- Euonymus alatus (Burning Bush)
- Euonymus alatus 'Compactus' (Dwarf Burning Bush)
- Forsythia x 'Nrn ortheGold' (Northern Gold Forsythia)
- Kolkwitzia amabilis 'Pink Cloud' (Pink Cloud Beautybush)
- Philadelphus coronarius 'Aureus' (Golden Mock-orange)
- Potentilla fruticosa (Potentilla)
- Prunus x cistena (Purpleleaf Sand Cherry)
- Prunus triloba 'Multiplex' (Flowering Almond)
- Rhus typhina 'Laciniata' (Cutleaf Staghorn Sumac)
- Salix alba 'Britzensis' (Coral Bark Willow)
- Salix chaenomeloides (Giant Pussy Willow)
- Salix exigua (Sandbar Willow)
- Salix purpurea 'Gracilis' (Arctic Willow)
- Sambucus canadensis 'Aurea' (Golden American Elder)
- Spiraea bumalda 'Anthony Waterer' (Anthony Waterer Spirea)
- Spiraea bumalda 'Goldflame' (Goldflame Spirea)
- Spiraea nipponica 'Snowmound' (Snowmound Spirea)
- Syringa meyeri 'Palibin' (Dwarf Korean Lilac)
- Syringa patula 'Miss Kim' (Miss Kim Dwarf Lilac)
- Syringa prestoniae (Preston Lilac varieties
- Syringa vulgaris 'French Hybrids' (French Hybrid Lilac varieties)
- Viburnum lantana 'Mohican' (Mohican Wayfaring Tree)
- Weigela florida 'Bristol Ruby' (Bristol Ruby Weigela)
- Weigela florida 'Variegata' (Variegated Weigela)
- Weigela florida 'Wine and Roses' (Wine and Roses Weigela)



Deutzia gracilis 'Nikko', with it's white pendant

flowers, is a dwarf form of Deutzia.

Photo: Helen Battersby

or weigela

Photo: Helen Battersby

Ornamental Shrubs for Full Sun or Part Shade

- Acer palmatum 'Inabe-shidare' (Red Cutleaf Japanese Maple)
- Acer palmatum 'Waterfall' (Green Cutleaf Japanese Maple)
- Aesculus parviflora (Bottlebrush Buckeye)
- Amelanchier alnifolia (Saskatoon berry)
- Aronia melanocarpa 'Autumn Magic' (Autumn Magic Chokeberry)
- Caryopteris clandonensis 'Arthur Simmonds' (Arthur Simmonds Bluebird)



Cornus sericea or Red-Twig dogwood is often grown gor it's bright red branches. The early Spring flowers are also attractive, and provide forage for pollinators.

Photo: Helen Battersby

- Clethra alnifolia 'Paniculata' (White Summersweet)
- Clethra alnifolia 'Pink Spires' (Pink Spires Summersweet)
- Cornus alba 'Bud's Yellow' (Bud's Yellow Dogwood)
- Cornus alba 'Ivory Halo' (Ivory Halo Dogwood)
- Cornus sericea (Red Osier Dogwood)
- Cornus sericea 'Flaviramea' (Yellow Twig Dogwood)
- Corylus avellana 'Contorta' (Corkscrew Hazel)
- Daphne burkwoodii 'Carol Mackie' (Carol Mackie Daphne)
- Enkianthus campanulatus (Redvein Enkianthus)
- Fothergilla gardenii (Dwarf Fothergilla)
- Heptacodium miconioides (Seven Son Flower)
- Hibiscus syriacus (Rose-of-Sharon)
- Hydrangea quercifolia (Oakleaf Hydrangea)
- Hydrangea paniculata 'Grandiflora' (Peegee Hydrangea)
- Hydrangea paniculata 'Limelight' (Limelight Hydrangea)
- Hydrangea paniculata 'Pink Diamond' (Pink Diamond Hydrangea)
- Hypericum kalmianum (St. John's Wort)
- Ilex verticillata 'Winter Red' (Winter Red Winterberry)
- Itea virginica 'Little Henry' (Little Henry Sweetspire)
- Ligustrum amurense (Amur Privet)
- Lonicera tatarica 'Arnold Red' (Arnold Red Honeysuckle)
- Magnolia soulangiana 'Susan' (Susan Magnolia)
- *Myrica pensylvanica* (Bayberry)
- Philadelphus 'Buckley's Quill' (Buckley's Quill Mock-orange)
- Philadelphus virginalis (Virginal Mock-orange)
- Physocarpus opulifolius 'Dart's Gold' (Dart's Gold Ninebark)
- Physocarpus opulifolius 'Diabolo' (Diabolo Ninebark)
- Physocarpus opulifolius 'Summer Wine' (Summer Wine Ninebark)
- Rhus aromatica (Fragrant Sumac)
- Rhus glabra 'Laciniata' (Cutleaf Smooth Sumac)
- Rubus odoratus (Flowering Raspberry)
- Salix integra 'Hakuro Nishiki' (Dappled Willow)
- Sambucus nigra 'Black Beauty' (Black Beauty Elder)
- Sambucus nigra 'Laciniata' (Cutleaf European Elder)
- Spiraea vanhouttei (Bridal Wreath Spirea)
- Stephanandra incisa 'Crispa' (Cutleaf Stephanandra)
- Symphoricarpos orbiculatus (Coralberry)
- Symphoricarpos chenaultii 'Hancock' (Hancock Coralberry)
- Viburnum carlcephalum (Fragrant Snowball)
- Viburnum dentatum 'Blue Muffin' (Blue Muffin Arrowwood)
- Viburnum opulus (European Highbush Cranberry)
- Viburnum plicatum 'Summer Snowflake' (Summer Snowflake Viburnum)

Ornamental Shrubs for Full Sun or Full Shade

- Acanthopanax sieboldianus (Fiveleaf Aralia)
- Cornus racemosa (Gray Dogwood)
- Cornus alba 'Siberica' (Siberian Dogwood)
- Cornus alba 'Elegantissima' (Silverleaf Dogwood)
- Hamamelis intermedia 'Arnold Promise' (Arnold Promise Witch-Hazel)

- Cornus alba 'Siberica' (Siberian Dogwood)
- Cornus alba 'Elegantissima' (Silverleaf Dogwood)
- Hamamelis intermedia 'Arnold Promise' (Arnold Promise Witch-Hazel)
- Hamamelis intermedia 'Diane' (Witch-Hazel)
- Hydrangea arborescens 'Annabelle' (Annabelle Hydrangea)
- Hydrangea macrophylla 'All Summer Beauty' (All Summer Beauty Hydrangea)
- Hydrangea macrophylla 'Nikko Blue' (Nikko Blue Hydrangea)
- Kerria japonica 'Pleniflora' (Double Kerria)
- Ribes alpinum (Alpine Currant)
- Ribes aureum (Flowering Currant)
- Sambucus canadensis (American Elder)
- Sorbaria sorbifolia (False Spirea)
- Symphoricarpos albus (Snowberry)

References

- 1. Damrosch, Barbara. *The Garen Primer.* New York, NY: Workman Publishing Company Inc., 1988.
- 2. Taylor's Guide to Shrubs. Boston Massachusetts: Houghton Mifflin Company. 1987.

Produced by the Toronto Master Gardeners, these Gardening Guides provide introductory information on a variety of gardening topics.

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