



# TORONTO MASTER GARDENER

# INVASIVE PLANTS FACT SHEETS

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**JAPANESE BARBERRY**



**SUPPORTED BY**  
**THE INVASIVE SPECIES CENTRE**





## JAPANESE BARBERRY

*(Berberis thunbergii)*

### WHAT IS JAPANESE BARBERRY

Japanese barberry, *Berberis thunbergii*, is a landscape shrub primarily grown for its ornamental fruit. Several cultivars are available from local nurseries with foliage in yellow, purple or green. These hardy plants may appear to be useful in the garden - but they are also invasive and should be avoided!

### WHY IS JAPANESE BARBERRY A PROBLEM

Japanese barberry produces red berries in the fall, which often persist through the winter. While the berries may not be a preferred food for the birds, as winter progresses and other food sources are used up, birds eat these berries. The seeds in the berries eventually pass through the birds' system and can be deposited quite a distance from the parent plant, resulting in this invasive plant spreading to ravines and natural areas from gardens that may be quite far away.

Once a Japanese barberry plant gets established, it can spread by rhizomes or from branches that root on contact with the ground. The plants can form a dense thicket in forests, open woodlands, meadows and wetlands. While it does best in full sun it is quite adaptable and can spread across a forest floor, deep into the woods, growing in full shade. Japanese barberry inhibits tree regeneration and the growth of herbaceous plants.

Thickets of Japanese barberry can displace the native plants that would normally grow on the forest floor. Barberry leafs out early and will outcompete spring ephemerals (including hepatica, trilliums, bloodroot, trout lily). Dense patches of barberry can change the pH of the soil, (making it more basic) so that native plants will not survive. It can also alter nitrogen levels and biological activity in the soil, ultimately reducing the layer of leaf litter.

White tailed deer avoid Japanese barberry as forage, giving it an advantage over native plants that are more heavily browsed. Barberry reduces forage and habitat for wildlife.

Thickets of barberry create a microclimate that favours deer ticks (*Ixodes scapularis*) and studies have shown a higher density of Lyme-infected ticks in these habitats.

## IDENTIFICATION

Barberry plants offered for sale in Canada are all Japanese barberry (all species and cultivars of barberry are legally prohibited in Canada, unless demonstrated to be resistant to black stem rust and as a result only rust-resistant Japanese barberry cultivars are available).

Japanese barberry is a compact, multi-stemmed, thorny shrub that grows to a height of 1 to 2m.

**Thorns** (a single straight spine at leaf nodes) can be found at any time of year and are useful in identification.



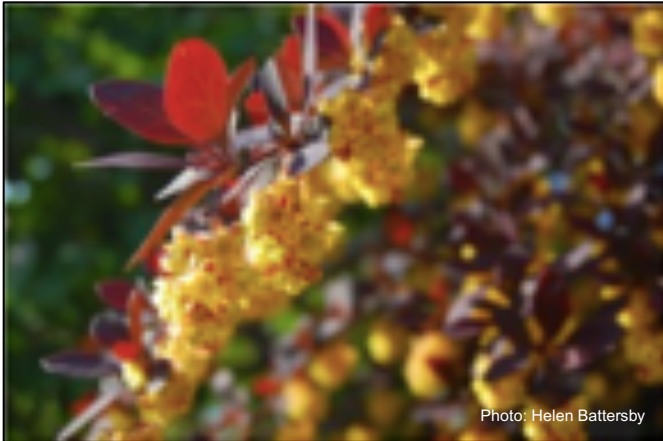
**Leaves** are alternate on the stem and held in clusters. They have an oval shape with smooth edges.



**Berries** are bright red and barrel shaped (1/2 cm long) and develop in the fall.



**Flowers** are pale yellow and dangle at the tips of short lateral branchlets.



## MANAGEMENT

The best solution is not to bring this plant home from the nursery! Newly established plants can easily be pulled if the roots are not yet well established (generally less than a year old). Removing established plants can be a challenge. They can be dug out or pulled out with a Weed Wrench, and this should be done before berries form, ideally before July. If the root crown isn't removed the plant will resprout. Secateurs can be used to cut the stems at ground level, but this will result in resprouting. Repeated cutting, every month, will stunt the plant and prevent berry production. It may take time, but with persistence, cutting the stems will prevent photosynthesis, deplete carbohydrate reserves of the shrub, and ultimately resprouts will stop appearing.

Non-reproductive plant parts can be disposed of in the City garden waste pick-up. Berries should not be put in garden waste since the composting temperatures may not be high enough to kill the seeds. If plant parts include

berries they should be put in the garbage (land fill). One more good reason to pull plants or cut stems before the berries form!

**If you see Japanese barberry** or other invasive species in the wild, please contact the Invading Species Hotline at 1-800-563-7711, or visit [EDDMapS Ontario](http://EDDMapS Ontario) to report a sighting.

## ALTERNATIVE NATIVE PLANTS

There are lots of great alternatives to Japanese barberry including:



## WINTERBERRY

*(Ilex verticillata)*



**ARROW-WOOD**  
*(Viburnum dentatum)*



**NINEBARK**  
*(Physocarpus opulifolius)*

## REFERENCES

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## PHOTO CREDIT

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