

## MAPLELEAF VIBURNUM

### *Viburnum acerifolium* L.

Plant Symbol = VIAC

Contributed by: USDA NRCS National Plant Data Center & the Biota of North America Program



Botany Dept., NMNH, Smithsonian Institution  
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#### Alternate Names

Dockmackie, guelder-rose, maple-leaved arrow-wood, possum-haw, squash-berry

#### Uses

Deer, rabbits, mice, skunks, ruffed grouse, ring-necked pheasants, wild turkeys, and many species of songbirds eat the fruits of maple-leaf viburnum. Deer, moose, rabbits, and beavers eat the twigs, bark, and leaves. The relatively low-growing plants provide good nesting and escape cover for birds and small mammals.

Maple-leaf viburnum has long been cultivated for its attractive summer flowers and foliage; then the autumn leaves turn rose-purple and contrast with the mature dark fruits. The plants will thrive in moist soils and a range of light conditions but they are a good choice for dry soils in deep shade. They can be used along forest edges, streamsides, and lakeshores.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

#### Description

*General:* Honeysuckle family (Caprifoliaceae). Native shrubs 0.5-2 m high, rhizomatous and forming

thickets; twigs pubescent. Leaves deciduous, ovate or orbicular, mostly deeply 3-lobed, 5-12 cm broad, coarsely toothed, lower surface minutely black-dotted, nearly glabrous to thinly pubescent with stellate hairs. Flowers white, bisexual, 4-6 mm wide, in upright, flat-topped clusters 4-7 cm wide. Fruit berry-like (drupes), 6-8 mm long, nearly black, with a single stone.

#### Variation within the species:

No varieties are currently formally recognized within *V. acerifolium* – previous named varieties within the species have described vaguely discernible and widely overlapping geographic trends of morphological variation.

*V. acerifolium* var. *acerifolium*

*V. acerifolium* var. *densiflorum* (Chapm.) McAtee

*V. acerifolium* var. *glabrescens* Rehd.

*V. acerifolium* var. *ovatum* (Rehd.) McAtee

*Distribution:* Widely distributed in eastern North America, New Brunswick (rare), Quebec, and Ontario south through Wisconsin, Illinois, and Arkansas to Florida and eastward into east Texas. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

#### Adaptation

Maple-leaf viburnum occurs in upland forests, hillsides, and ravine slopes. It grows best in well-drained, moist soils and is tolerant of acid soils. It requires partial shading for optimum growth and development and occurs primarily in mid- to late-seral communities. It is a common understory species in beech-maple forests in the northeastern and midwestern United States; along the Gulf coastal plain, it is found in rich deciduous woods, often with white oak. Flowering May-August; fruiting July-October.

#### Establishment

Maple-leaf viburnum begins seed production at about 2 years of age and produces abundant fruit every year. Most seeds have an impermeable seedcoat and embryo dormancy that requires a warm-cold stratification sequence to be broken. Vegetative reproduction through rhizomes is extensive.

## Management

Low- to moderate-severity fires top-kill maple-leaf viburnum. It apparently survives fire by sprouting from underground rhizomes, but these are shallow and easily damaged and the species decreases with exposure to repeated fires.

*Viburnum leaf beetle*: The viburnum leaf beetle (*Pyrrhalta viburni*), native to Europe and Asia, was first encountered in North America in 1947, perhaps arriving earlier from Europe on nursery plants. It received little notice until 1978, when it caused severe defoliation of ornamental viburnums in Ontario and Quebec. It has now reached western New York and Maine and become a concern in urban landscapes and nurseries.

The adult and the larva “skeletonize” leaves by feeding on the leaves between the midrib and larger veins. Plants, which have been defoliated for 2-3 consecutive years, may be killed. The preferred host is *Viburnum opulus* and its selections; lesser damage is caused to *V. lantana* and *V. rafinesquianum*, *V. dentatum*, *V. acerifolium*, and *V. lentago*. Other species, particularly *V. rhytidophyllum* and *V. carlesii*, are relatively unaffected.

The entire life cycle of the viburnum leaf beetle takes about 8-10 weeks. Larvae hatch in early May and feed on the viburnum leaves throughout the larval period, which lasts 4-5 weeks. The larvae pupate in the soil. The adults (4.5-6.5 mm long, brown) appear by mid-July and continue eating the leaves, then mate and lay overwintering eggs on the twigs. Egg-laying holes are in a straight line on the underside of the current season's growth.

Chemical control of the viburnum leaf beetle is best applied to young larvae, because adults will fly away or drop to the ground if disturbed. If over-wintering egg sites are found, affected wood should be pruned and destroyed before the eggs hatch. Examine upper and lower leaf surfaces for feeding larvae. Potential biological control mechanisms are being studied.

## Cultivars, Improved and Selected Materials (and area of origin)

These plant materials are readily available from commercial sources. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under “United States Government.” The Natural Resources Conservation Service will be listed under the subheading “Department of Agriculture.”

## References

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