

Viburnum Leaf Beetle Citizen Science How to identify viburnums

Express Key

Is it a Viburnum?

- **1A1**. If the plant is a vine (low and trailing along the ground), you do not have a viburnum.
- 1A2. If the plant is a shrub (many stems) or small tree about 3 to 12 feet tall, go to 2A.
 - **2A1**. If the leaves alternate on the twig, you do not have a viburnum.
 - 2A2. If the leaves are opposite each other on the twig, go to 3A.
 - **3A1**. If the leaf is compound (three or more leaflets), it is not a viburnum.
 - **3A2**. If the leaf is simple (one main part), go to 4A.
 - **4A1**. If the leaf is lobed (divided into three or more segments, resembling a maple leaf), go to 5A.
 - **4A2**. If the leaf is not lobed (not divided into segments) go to 5B.
 - **5A1**. If the petiole (leaf stem) is without stipules (fang-like appendages at the base) it is not a viburnum.
 - **5A2**. If the petiole has stipules, you have a viburnum. Go below to **Which viburnum is it?**
 - **5B1**. If the twigs have corky ridges you do not have a viburnum
 - **5B2**. If the twigs do not have corky ridges go to 6A.

Make a long tapered cut in the twig.

- **6A1**. If the inside of the stem is hollow or chambered you do not have a viburnum.
- **6A2**. If the inside of the stem is solid **go to 7A**.

Look at the twig between the petioles (leaf stems) - best seen on newest growth.

- **7A1**. If the base of the petioles are **not connected** by a line, you do not have a viburnum.
- 7A2. If the base of the petioles are connected by a line, go to 8A.

Look for fruit, or dried flower/seed heads.

- **8A1**. If the fruiting structure is a dry flower or capsule, you do not have a viburnum
- **8A2**. If the fruiting structure is a red, blue or black berry, **go to 9A**.
 - **9A1**. If the leaf margin is entire (smooth) **and** the underside is glabrous (smooth) you do not have a viburnum.

9A2. If the leaf margin has serrations (teeth) or if the margin is smooth but the underside is pubescent (velvety covering), go below to **Which viburnum is it?**

Which viburnum is it?

- 1A1. If your leaf is divided into lobes (segments, resembling a maple leaf) go to 2A.
- 1A2. If your leaf is orbicular (rounded) or ovate to broad ovate (egg to wide egg shape), go to 2B.
- 1A3. If your leaf is elliptic (football) or oblong-ovate (long and narrow shaped), go to 2C.
 - **2A1**. If the underside of the leaf has black dots your species is *Viburnum acerifolium*.
 - **2A2**. If there are glands (bumps) on petiole (leaf stem) **and** pubescent (hairs under magnification) veins on the underside of the leaf, your species is *Viburnum opulus*.
 - **2A3.** If there are glands on the petiole **and** the veins on the underside of the leaf are without hairs, your species is *Viburnum sargentii*.
 - **2B1**. If the teeth on the leaf margin are closely spaced, 10 or more teeth in the width of a dime, go to 3A.
 - **2B2**. If the teeth are widely spaced, 9 or fewer teeth within the width of a dime, go to 3B.
 - **2B3**. If the leaf margin has obscure, indistinct or no teeth **go to 3C**.
 - **3A1**. If your leaf has dense pubescence (velvety tufts under magnification)) on the underside of the along the veins, your species is *Viburnum lantanoides*.
 - **3A2**. If your leaf does **not** have pubescence on the underside, **go to 4A**.
 - **4A1**. If the petiole (leaf stem) has wavy margins, your species is *Viburnum lentago*.
 - **4A2**. If the petiole is without wavy margins, your species is *Viburnum prunifolium*.
 - **3B1**. If your leaf is pubescent (velvety tufts under magnification) on the underside, go to 4B.
 - **3B2**. If your leaf does not have pubescence on the underside, go to 4C.
 - **4B1.** If the length of the petiole (leaf stem) is less than the width of a dime, go to 5A.
 - **4B2.** If the length of the petiole is greater than the width of a dime, go to 5B.
 - **5A1**. If the leaf veins extend beyond the margin, your species is *Viburnum carlesii*. (*Viburnum x carlcephalum* is very similar.)
 - **5A2**. If the leaf veins do not extend beyond the margin, your species is *Viburnum macrocephalum*.
 - **5B1**. If your leaf has less than 9 secondary leaf veins on one side of the midrib (main central vein), your species is *Viburnum lantana*.
 - **5B2.** If your leaf has 9 or more secondary leaf veins on one side of the midrib, your species is *Viburnum plicatum* var. *tomentosum*.
 - 4C1. If the twigs are smooth, go to 5C.
 - 4C2. If the twigs are hairy, go to 5D.

- **5C1.** If your leaf has brown dots on the underside, especially along the veins (under magnification) **and** the teeth are rounded, your species is *Viburnum cassinoides*.
- **5C2.** If your leaf does not have brown dots on the underside, your species is *Viburnum dentatum*.
- **5C2.** If your leaf has brown dots on the underside **and** the teeth are sharp pointed, go to *Viburnum wrightii*.
- **5D1**. If your leaf does not have 2 to 4 circular glands at the base of the underside, your species is *Viburnum dentatum*.
- **5D2.** If your leaf has 2 to 4 circular glands at the base of the underside, your species is *Viburnum dilatatum*.
- **3C1.** If your leaf is more rounded, your species is *Viburnum carlesii*.
- **3C2.** if your leaf has few, if any teeth, your species is *Viburnum x burkwoodii*.
- **3C3.** If the leaf is egg shape, your species is *Viburnum x carlcephalum*.
- **2C1**. If the teeth are closely spaced, 10 or more within the width of a dime, go to 3D.
- 2C2. If the leaf teeth are widely spaced, 9 or fewer within the width of a dime, go to 3E.
- 2C3. If the edge of the leaf has obscure, indistinct or no teeth go to 3F.
 - **3D1.** If the petiole (leaf stem) has wavy margins, your species is *Viburnum lentago*.
 - **3D2.** If the petiole is without wavy margins, your species is *Viburnum prunifolium*.
 - **3E1**. If the underside of the leaf is pubescent (velvety tufts under magnification) go to 4D.
 - **3E2**. If the underside of the leaf is not pubescent, go to 4E.
 - **4D1.** If your leaf has 9 or more secondary leaf veins on one side of the midrib (main central vein), your species is *Viburnum plicatum* var. *tomentosum*.
 - **4D2.** If your leaf has are fewer than 9 secondary leaf veins on one side of the midrib, **go to 5E.**
 - **5E1**. If the petiole (leaf stem) is longer than the width of a dime, your species is *Viburnum lantana*.
 - **5E2.** If the petiole is shorter than the width of a dime **and** the teeth are distinct, your species is *Viburnum macrocephalum* (*Viburnum x carlcephalum* is very similar.)
 - **5E3.** If the petiole is shorter than the width of a dime **and** the teeth are small or irregular your species is *Viburnum x juddii*.
 - **4E1.** If the leaf has brown dots on the underside (under magnification), go to 5F.
 - **4E2.** If the does not have brown dots on the underside **go to 5G**.
 - **5F1.** If the leaf has brown dots mostly along the veins on the underside (under magnification), your species is <u>Viburnum cassinoides.</u>
 - **5F2.** If the leaf smells like burnt rubber when crushed, your species is **Viburnum sieboldii.**

- **5G1.** If your leaf has 2 to 4 circular glands at the base of the underside, your species is *Viburnum dilatatum*.
- **5G2.** If the leaf base is cuneate (long taper), your species is *Viburnum farreri*.
- **5G3.** If the leaf base is rounded, your species is *Viburnum setigerum*.
- **5G4.** If the leaf smells like burnt rubber when crushed, your species is *Viburnum sieboldii*.
- **3F1**. If the leaf is less than 3 inches long go to 4F.
- **3F2**. If the leaf is more than 3 inches long **go to 4G**.
 - **4F1.** If the twig is smooth (under magnification), your species is *Viburnum cassinoides*.
 - **4F2.** If the top of leaf is smooth (under magnification), your species is *Viburnum utile*.
 - **4F3.** If there are sparse teeth along the margin **and** the twig is hairy (under magnification), your species is *Viburnum x burkwoodii*.
 - **4G1.** If the leaf has brown dots on the underside (under magnification), your species is *Viburnum cassinoides*.
 - **4G2.** If the leaves are deeply wrinkled, your species is *Viburnum rhytidophyllum*.
 - **4G3.** If the leaves are less wrinkled your species is *Viburnum* x *rhytidophylloides*.
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