

# *Hamamelis virginiana* L.

Standardized Common Name: Witch Hazel

**Family:** Hamamelidaceae

**Parts in Commerce:** Leaves or bark

## Identification:

### Leaves

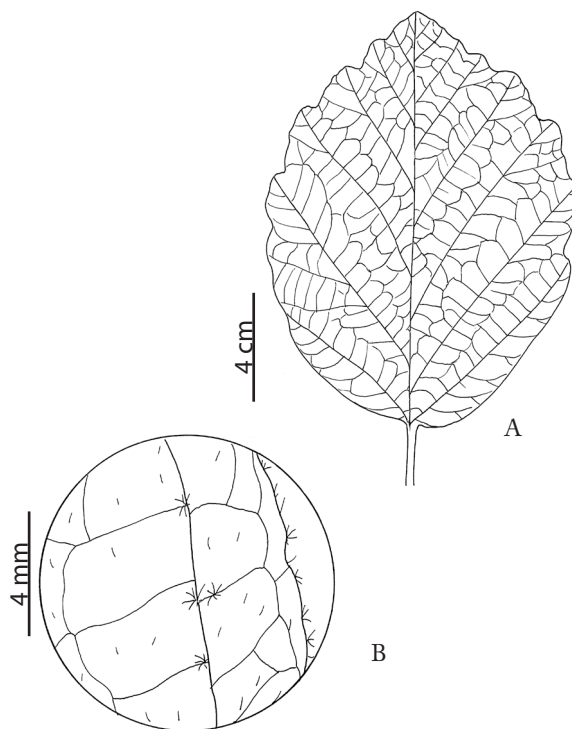
- Petiole 6–15(–20) mm long
- Blade obovate to rhomboid or broadly elliptic or suborbicular, (3.5–)6–14(–16.5) cm long
- Base oblique, cuneate to rounded or barely cordate
- Apex acute to acuminate or rounded
- Margin sinuate to crenate or occasionally sinuate-dentate, often ciliate
- Venation pinnate, with secondary veins conspicuous, straight, running to margins (those to widest portion of leaf usually forking once); higher order venation visible, netted
- Upper surface dark to olive green, nearly glabrous at maturity
- Lower surface pale green, shiny, bearing tufts of stellate hairs around veins; small round protrusions sometimes visible on blade
- Texture slightly leathery
- Taste astringent, somewhat bitter

### Bark

- Mostly in channeled pieces <2.5 cm broad
- <1.5(–2) mm thick
- Outer surface of grayish cork with transverse lenticels, smooth or somewhat scaly, but not glossy; sometimes cork is peeled off and outer surface is exposed cortex, pale reddish brown, smooth or faintly longitudinally striated
- Inner surface pale reddish pink to reddish or yellowish brown, faintly striated, sometimes with attached fragments of whitish xylem
- In transverse section, contains grayish cork (if not removed), at least 10 cells thick; narrow brown cortex; pale band of fiber cells; reddish pink phloem

- Fracture short in outer portion, fibrous in inner portion
- Taste astringent, bitter

**Adulterants:** Substitution of *Corylus avellana* L. (European Hazel, also known as European hazelnut or filbert) has been reported but is unlikely to occur in normal commerce, because the two genera are easily distinguished and *C. avellana* is seldom found outside cultivation in North America. The leaves of *C. avellana* have nearly symmetrical bases and biserrate, sharp-toothed margins. The petioles and veins are pubescent with unbranched glandular hairs, but there are no stellate hairs. The outer bark is smooth and coppery brown, sometimes peeling in thin strips, with a thin cork.



**Figure 31:** a–b, *Hamamelis virginiana* leaf and close-up of lower surface.

**Taxonomy:** *Hamamelis* includes four species, of which two are native to North America. There are several synonyms for *H. virginiana*, none commonly encountered in literature. Hybridization with the other North American species, *H. vernalis* Sargent (Ozark witch hazel), seems to be limited and does not blur species boundaries.

**Description:** Shrub or small tree, to 6(–10) m tall, often forming clumps, sometimes suckering; bark gray to grayish brown, smooth to slightly rough. Leaves alternate, stipulate, broadly elliptic to obovate or suborbicular, (3.5–)6–14(–16.5) cm long; base oblique, cuneate to rounded; apex acute to acuminate or rounded; margins sinuate and often ciliate; both surfaces pubescent with stellate and simple hairs, the upper surface becoming nearly glabrous with age. Flowers borne in clusters of 3; calyx small, 4-lobed; petals yellow, strap-shaped, 10–20 mm long; sta-

mens 4, short; staminodes 4, producing nectar; ovary inferior, 2-styled. Fruit a woody capsule, 10–16 mm long, explosively dehiscent, 2-seeded; seeds black, glossy, 5–9 mm long.

#### References:

Greenish HG. *Materia Medica*. Jodhpur: Scientific Publishers (India); 1920 reprinted 1999:38–39 and 255–256.

Meyer FG. Hamamelidaceae. In: Flora of North America Editorial Committee, eds. *Flora of North America*. Vol. 3. New York, NY: Oxford University Press; 1997:362–367.

Wichtl M, ed. *Herbal Drugs and Phytopharmaceuticals*, 3<sup>rd</sup> English ed. Stuttgart: medpharm Scientific Publishers and Boca Raton, FL: CRC Press; 2004:264–270.