

# Plant Diversity Website

## *Lonicera hirsuta* Eaton

**Common Names:** hairy honeysuckle

**Etymology:** *Lonicera* is named after the 16<sup>th</sup> century German botanist, physicist and herbalist Adam Lonitzer (also spelled Lonicer), while *hirsuta* comes from the Latin *hirsutus*, meaning “hairy,” “rough,” or “shaggy.” The term honeysuckle comes from the honey or nectar that can be easily sucked from the flower (3, 5).

**Botanical synonyms:** *Lonicera hirsuta* Eat. var. *interior* Gleason and *Lonicera hirsuta* Eat. var. *schindleri* Boivin (1).

**FAMILY:** Caprifoliaceae, the Honeysuckle family

**Quick Notable Features:**

- pubescent stems, petioles, and leaf surfaces, as seen in image to the right.
- ciliate leaf margins
- small, hairy, yellow, tubular flowers with highly exserted stamens and style.

**Plant Height:** typically 2.5 – 3m at maturity (11)

**Subspecies/varieties recognized:**

All previous subspecies and varieties are now united under the one name *Lonicera hirsuta*.

**Most Likely Confused with:** Within the genus *Lonicera*, *L. dioica* is the most similar. *L. caprifolium* also bears similarities in its flowers. Other than confusion within the genus, it may be mistaken for a species of *Euonymus*.

**Habitat Preference:** Found in “woods and thickets, with cedar, fir, oak, aspen, pine, birch, and other trees... particularly along borders, clearings, and banks; often in sandy or rocky ground, occasionally in swamps” (4).

**Geographic Distribution in Michigan:** Found in almost all counties north of the 45<sup>th</sup> parallel except Alcona, Kalkaska, Antrim, and Ostego counties (in the lower peninsula) and Luce and Alger counties (in the upper peninsula). It is also found in Ingham County, in the southern lower peninsula (1).



**Known Elevational Distribution:** no data found.

**Complete Geographic Distribution:** This North American native is found from New England and eastern New York to southern Ontario, Minnesota, and Manitoba (1, 6).

**Vegetative Plant Description:** This trailing or climbing, perennial, deciduous vine has a smooth, woody stem and glandular-villous branchlets. The oppositely arranged leaves are 3.7-15cm long and 1.5-9cm wide, dark-green above and lighter beneath (see images above). The leaves are simple, entire-margined, broadly oval, “tapered to a sessile or subsessile base, which is generally densely pubescent.” Although the margins are entire, they can be fringed with hair, or cilia (this can be seen in the second image above and the second image below). The apex of the leaf can range from obtuse to acute. Leaves are pubescent on both surfaces, especially the abaxial surface. The uppermost leaves are united into 1 or 2 disks that are usually acuminate at each end, and the lower ones are sessile or short petioled (4, 5, 10, 11).

**Climbing Mechanism:** Darwin noted that all members of the genus *Lonicera* climb with the apex of the plant, which moves dextrally (left to right) or, as Darwin referred to it “with the sun” (8).

**Flower Description:** The inflorescence is a terminal, interrupted spike that is usually sessile, but can be peduncled, and is usually subtended by a pair of rounded leafy bracts. The calyx is minute and the bilabiate corolla is 2-2.5cm long and orange-yellow; it may turn reddish. It is hairy within, and sparsely hairy without (seen to the right). The upper lip consists of four lobes. The five stamens and single style are clearly exserted, and the ovary is inferior (5, 6, 11). The genus *Lonicera* is known to have 2-3 locules, however this has not been confirmed for this species.



**Flowering Time:** In central and northeastern United States, as well as the adjacent areas of Canada, it is known to flower from May to July, sometimes until August (5, 7).

**Pollinator:** Although specific data was not found for this species, the flower is rather similar to that of *Lonicera caprifolium*. The narrow-throated, fragrant flowers suggest pollination by moths or butterflies. The yellow color suggests it is pollinated nocturnally as yellow or white corollas are good indicators of such. Although moths are the most likely pollinators, other small insects and birds may also contribute.



**Fruit Type and Description:** A cluster of small (exact size not specified), fleshy, smooth, orange to red berries matures and is dispersed from July to October. The persistent calyx on two mature and a few immature fruits can be seen in the image to the right (5, 11, 12).

**Seed Description:** no specific information located.

**Dispersal Syndrome:** In general, the small, “attractive red, orange, or black” fruits of the genus *Lonicera* are consumed by birds and the few to many seeds of each fruit are dispersed in feces as the bird travels. Stiles (1980) showed that because of their small seeds, tough pericarp, and fruiting time, the fruits of both this species and *L. dioica* are more likely to be dispersed by non-migratory birds and mammals. They fruit after fledglings have left the area and before the migratory seasons for most birds. Furthermore, the sweet taste (high sugar content) and relatively low position to the ground serve as a further attractant to local, non-migratory birds (such as turkeys) and mammals (7, 12).

**Distinguished by:** Within the genus, *L. hirsuta* is most likely confused with *L. dioica* due to both species’ terminal cluster of flowers and fruit. However, *L. dioica* has leaves that are narrowly elliptic, lack cilia, and are smooth both above and below. The apex of the leaves of *L. hirsuta* is acute to blunt, while the apices of the leaves of *L. dioica* are blunt to rounded (11).

The flowers of *L. hirsuta* are similar to those of *L. caprifolium*. However, those of *L. caprifolium* are usually longer. According to Humphrey (1914), a more evident difference between the inflorescences is that *L. caprifolium* flowers are glabrous within and the terminal cluster is sessile, while flowers of the inflorescence of *L. hirsuta* are pubescent and the cluster is more or less stalked (10).

*L. hirsuta* may also be confused with members of the genus *Euonymus*; however, members of *Lonicera* almost always have entire margins, while the margins of members of *Euonymus* bear leaves with fine serrations. *L. hirsuta* is also pubescent whereas *Euonymus* species are glabrous.

**Other members of the family in Michigan (number species):** *Lonicera* – 18, *Diervilla* – 1, *Kolkwitzia* – 1, *Linnaea* – 1, *Sambucus* – 2, *Symphoricarpos* – 3, *Triosteum* – 2, *Viburnum* – 11 (1).

**Ethnobotanical Uses:** none found (13, 14)

**Phylogenetic Information:** The family Caprifoliaceae consists of 36 genera and within the family, clades include Linnaeae (*Dipelta*, *Abelia*, *Kolkwitzia*, *Valeriana* and *Dipascus*), Diervillaceae (*Diervilla* and *Weigela*) and an unnamed clade of *Lonicera*, *Symphoricarpos* and their relatives. Currently, Caprifoliaceae are the only members of the Dipsacales clade, but this organization is somewhat in doubt (2). As it stands, the Dipsacales are part of the Euasterids II, which also contains the Aquifoliales, Apiales, Dipsacales, and Asterales. These are all members of the Core Asterids of the Asterid clade, which, along with the Rosids, make up the Core Tricolpates (2).

**Interesting Quotation or Other Interesting Factoid not inserted above (7):**

- First cultivated in 1825
- It has been observed that the seeds of the genus *Lonicera* remain viable after storage for 15 years in sealed containers, at low temperatures.
- While most species of *Lonicera* require prechilling in order for the seeds to germinate, this species and *L. oblongifolia* require “warm stratification at 20/30°C for 60 days” (7).
- This species is considered endangered in Massachusetts and Pennsylvania (1).
- Recommended as a good alternative to plant in place of invasive species of *Lonicera*.

**Literature and websites used:**

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6. Gleason, H.A. 1968. *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, vol. 3. Hafner Publishing Co., Inc, New York.
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10. Humphrey, L.E., 1914 *The Honeysuckle Family in Ohio*. The Ohio Naturalist 14: 6.
11. *Plant Description: Lonicera hirsuta*. Last modified: 1/22/07 Northern Ontario Plants Database. <<http://www.northernontarioflora.ca/description.cfm?speciesid=1004712>>
12. Stiles, E.W. 1980 *Patterns of Fruit Presentation and Seed Dispersal in Bird-Disseminated Woody Plants in the Eastern Deciduous Forest*. The American Naturalist. Chicago: The University of Chicago Press.
13. *Plants For A Future: Edible medicinal, and useful plants for a healthier world*. <<http://www.pfaf.org/index.html>> Accessed November 2006.

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- 4) The image of the fruit is copyright Susan J. Meades from the Northern Ontario Plants Database at <<http://www.northernontarioflora.ca/description.cfm?speciesid=1004712>>

**PRIMARY AUTHOR:** Marko Melymuka, with editing by Robyn J. Burnham

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For additional information on Michigan Plant Diversity web pages please contact Robyn J. Burnham via email: [rburnham@umich.edu](mailto:rburnham@umich.edu)