

Plant Diversity Website

Rubus hispidus Linnaeus

Common Names: Running Swamp Blackberry (1), Dewberry (3), Bristly Blackberry (6), Swamp Dewberry, Bristly Dewberry (7), Northern Dewberry (8)

Etymology: “Rubus” means blackberry and the latin word hispidus means hispid, or bristly (4,12).

Botanical synonyms (6, 11,13):

R. obovalis Michaux

R. obovatus Pers.

R. sempervirens Blgelow

FAMILY: Rosaceae, the Rose family (2)

Quick Notable Features:

- Trailing scrambler
- White flowers and black berries
- Dense bristles
- 3-5 dark green, toothed leaflets



Plant Height: can grow up to 2.5m (2).

Subspecies/variety recognized (7):

R. hispidus var. *obovalis*

R. hispidus var. *blanchardianus*

R. hispidus var. *cupulifer*

R. hispidus var. *hispidus*

R. hispidus var. *major*

R. hispidus var. *pervarius*

R. hispidus var. *setosus*

R. hispidus var. *suberectus*

R. hispidus subsp. *continentalis*



Most Likely Confused with: *R. flagellaris*, *R. setosus*, *R. trivialis*, *R. allegheniensis*, *R. caesius*, *R. arundelanus*, *R. orarius*, *R. cuneifolius*, *R. argutus*, *Rosa eglantheria*, and *Rosa setigera* (3, 5, 20).

Habitat Preference: *R. hispidus* prefers moist and open habitats; it thrives in disturbed sites as a pioneer species, but it is able to persist to later stages of succession (2,5,8).

Geographic Distribution in Michigan: *R. hispidus* is found in most counties in the Lower Peninsula as well as most southern Upper Peninsula counties (13).

Known Elevational Distribution: The species occurs up to 980m altitude in West Virginia (19).

Complete Geographic Distribution: *R. hispidus* is found in Canada (NB, NF, NS, ON, PE, QC) and in the midwest and eastern United States (CT, DC, DE, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, NC, NH, NJ, NY, OH, PA, RI, SC, TN, VA, VT, WI, WV) (7,8,13).

Vegetative Plant Description: The trailing pubescent stems (terete or angled) grow up to 2.5m with a high density of long, fine bristles. Stems often root at the tips. Leaves are pinnately compound and alternate, with 3-5 leaflets. Leaflets are light green, pubescent below and dark green above, serrate, obovate, acuminate, ranging from 2-6cm long and 1-4cm wide (1,2,21).

Climbing Mechanism: trailing, using the fine bristles for adhering to host (2, RJB pers. obs.).

Flower Description: The inflorescence is a cyme of small white-petaled flowers. Each flower bears 3-7 sepals (3-5mm) that are oblanceolate and hairy, 5 petals (5-9mm long, 2-5mm wide), and stamens and carpels that are numerous. Styles are terminal on each carpel. Dewberries have two ovules per pistil (usually between 20-40 pistils per flower), which will mature into the seeds (2,6,21,23).



Flowering Time: Flowers from June through early September in the Central and Northeastern United States and adjacent Canada (2).

Pollinator: insects, including honeybees (9,23).



Fruit Type and Description: *R. hispidus* matures the black fruits from mid August to October. The fruit type is an aggregate of drupelets (75-85) that turn from green to red to black as the fruit matures (2,8, 23). Birds disperse the fruits, as well as the casual hiker.

Seed Description: The small seeds are bird dispersed, high in sugar, low in lipids, and usually are not retained on the plant for long. The seed requires cold stratification for germination (16, 17).

Dispersal Syndrome: *R. hispidus* reproduces sexually if visited by insect pollinators, and birds often disperse the seeds, but it also engages in vegetative reproduction through clonal expansion. A study by Abrahamson (1975) indicates that

sexual reproduction is preferred when the plant is growing in dense woods, while vegetative reproduction is preferred in open areas (8,9,10,16).



Distinguished by: *Rubus hispidus* var. *hispidus* can be differentiated from *R. hispidus* var. *obovalis* by the thickness of the stems, the number of bristles, and the size of terminal leaflets. *R. hispidus* var. *hispidus* stems are 2-5mm thick, with 30-200 bristles per cm and a terminal leaflet 2.5-7 cm. long and 2-5.5 cm. wide. *R. hispidus* var. *obovalis* stems are thinner, measuring only 1-2mm thick, with 1-20 bristles per cm. and a smaller terminal leaflet measuring 1.5-4.5 cm. long and 1-3.5 cm. wide. Compared to *R.*

flagellaris, *R. hispidus* bristles are thinner and longer, not often with broad bases like the shorter bristles on *R. flagellaris*. The inflorescence in *R. flagellaris*, and especially *R. setosus*, are very likely to be glandular while *R. hispidus* rarely show this trait. The flatter-topped inflorescence in *R. setosus* is another distinctive trait, and even though the bristles are very similar to *R. hispidus*, the erect stems do not root at the tips as in *R. hispidus*, whose stems trail and root. *R. trivialis* has glandular bristles and single flowers while *R. hispidus* bristles are eglandular and flowers are aggregated. *R. allegheniensis* is also distinguished by the erect primocane with broad-based spines. *R. caesius* has spines, but not bristles. *Rosa eglanteria*'s leaves have odor, the thorns have a large base and slightly more leaflets than *R. hispidus*, which is not fragrant and has fine bristles. *Rosa setigera* bears red receptacle-derived fruits (hips), broad-based curved thorns, and pink flowers, while *R. hispidus*' fruits are black drupelets and its flowers are white (2,3,5,20,21).

Other members of Michigan Rosaceae (# species): *Rubus* (48), *Crataegus* (42), *Rosa* (18), *Prunus* (16), *Potentilla* (11), *Geum* (9), *Amelanchier* (6), *Spiraea* (6), *Agrimony* (5), *Malus* (4), *Sanguisorba* (3), *Sorbus* (3), *Physocarpus* (2), *Fragaria* (2), *Gillenia* (2), *Photinia* (2), *Argentina* (1), *Aruncus* (1), *Chamaerhodos* (1), *Comarum* (1), *Dalibarda* (1), *Dasiphorda* (1), *Duchesnea* (1), *Filipendula* (1), *Pyrus* (1), *Sibbaldiopsis* (1), *Sorbaria* (1), *Waldsteinia* (1) (ref. 20).

Ethnobotanical Uses: Native Americans used the roots to treat cough, fever, and diarrhea. The fruits were used to treat dysentery (14, 15).

Phylogenetic Information: The genus *Rubus* is classified as member of the subfamily Rosoideae in the Rosaceae, which is in the order Rosales, a Eudicot clade of the angiosperms. Members of the Rosaceae family can be found worldwide, and the genus *Rubus* is found in both north and south temperate climatic zones (18, 22).

Interesting Quotation or Other Interesting Factoid not inserted above: Hybrids derived from a cross between *R. hispidus* and other *Rubus* species, such as *R. setosus*, are found in Michigan: *R. distinctus*, *R. kalamazoensis*, *R. plus*, and *R. signatus* (20).

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