

New York City EcoFlora



Lamium (Lamiaceae, Mint Family)
Deadnettle

Description: Herbs, annual or perennial, aromatic or foetid. Leaves opposite, usually ovate or reniform, the margins crenate or toothed, the bases usually cordate, upper leaves usually crowded, short-petiolate. Flowers sessile (or nearly so) in verticels of clustered cymes, cleistogamous flowers sometimes present; calyx tubular to campanulate, sharp-toothed; corolla, pink, purple, white or yellow, the tube usually longer than the calyx, 2-lipped, the upper hooded, the lower 3-lobed; stamens 4, in 2 pairs, ascendant under the upper corolla lobe, not exerted, the anthers ciliate. Fruit a schizocarp of 2–4 nutlets.

Where Found: The genus is native to Europe, Asia and North Africa and is naturalized in North America. The "weedy" annual species are adapted to disturbed sites in urban and agricultural areas.

Natural History: Henbit (*Lamium amplexicaule*), Deadnettle (*Lamium purpureum*) and Cut-Leaved Deadnettle (*Lamium hybridum*) are winter-annuals that germinate in the fall and overwinter as small plants, often going unnoticed in the landscape. As the weather warms in spring, they grow vigorously, flower and set seed before the heat of summer, germinating in fall and starting the process over. Other common winter annuals in our area include Chickweed (*Stellaria media*),

Mustards (*Brassica* spp., *Barbarea vulgaris*, *Capsella bursa-pastoris*), Bedstraw (*Galium* spp.), Sow-Thistles (*Sonchus* spp.), Prickly Lettuce (*Lactuca serriola*), Persian Speedwell (*Veronica persica*) and the native Common Horseweed (*Erigeron canadensis* var. *canadensis*). Many winter-annuals are autogamous, a reproductive strategy common to short-lived species in unpredictable circumstances. These species are typically self-fertile and sometimes the flowers don't even open (cleistogamous). Henbit produces cleistogamous flowers at the beginning and ends of the flowering cycle, these being the most unpredictable times for weather and pollinators. The benefits usually associated with cross-pollination such as genetic variability are outweighed by the assurance of an abundant seed crop. Autogamy is also an isolating mechanism, reducing hybridization between closely related species and also "fixing" successful mutations.

Cultural History: Deadnettle was reported from the Hudson Valley in 1751 (Colden) and New York City in 1809 (Eddy). John Torrey (1819) reports it from "old-fields and cultivated grounds". Like many other mints with strong aromas, the annual species of *Lamium* are sometimes used medicinally.

Name Notes: The genus name *Lamium* is said to be the old Latin name for nettle-like plants. They are called "Deadnettles" because some of them resemble nettles but do not have stinging hairs; hence they are "dead".

Species Notes: Most "species" of *Lamium* are closely related, with subtle differences between them. The most recent morphological assessment found 16 broad species groups with several subspecies and varieties (Mennema 1989), whereas data from other lines of evidence suggest up to 40 species. Currently there are 25 accepted names in the [World Flora Online](#) catalog. *Lamium* are distinguished from other members of the family by verticels of 6–12 sessile flowers in axils of upper leaves; calyx with five sharp teeth; zygomorphic corolla with enlarged upper lip, and; four stamens. The perennial, rhizomatous species *Lamium galeobdolon* (L.) Crantz, Yellow Archangel and *Lamium maculatum* L., Spotted Deadnettle are cultivated in New York City and sometimes spread aggressively, but are not known to form spontaneous populations.

References: Colden, C. 1751. *Plantae Coldenhamiae in provincia noveboracensi americes sponte crescentes*. Acta Societatis Regiae Scientiarum Upsaliensis. Eddy, C.W. 1807. *Plantae Plandomenses; or, A catalog of plants growing spontaneously in the neighbourhood of Plandome, the country residence of Samuel L. Mitchell*. Medical Repository. Mennema, J. 1989. A taxonomic revision of *Lamium* (Lamiaceae). *Leiden Bot. Ser.* 11: 1–198. Taylor, R. 1991. The origin of *Lamium hybridum*, a case study in the

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search for the parents of hybrid species. Northwest Science 65: 116–124. Torrey, J. 1819. A catalogue of plants growing spontaneously within thirty miles of the city of New York. Albany, NY: Lyceum of Natural History of New York.

Key to *Lamium* of New York City

1. Leaves subtending the flower clusters spreading or ascending, sessile, often clasping, usually wider than long; corolla tubes long exerted from calyx *Lamium amplexicaule*.
1. Leaves subtending the flower clusters pendent, petiolate, usually longer than wide; corolla tubes scarcely exerted.
 2. Leaf blade margins crenate, adjacent teeth \pm equal; corolla tube and throat pale pink, with dark longitudinal lines, gradually flared into gibbous throat *Lamium purpureum*.
 2. Leaf blade margins incised, adjacent teeth unequal; corolla tube and throat pink to almost purple, weakly lined, abruptly flared into gibbous throat *Lamium hybridum*.



Lamium amplexicaule L. – Henbit Deadnettle

Description: Annual or biennial herb, branching from the base, the stems ascending. Leaves wide-spaced, reniform or depressed ovate, deeply incised, the upper larger, clasping, spreading or ascending. Flowers 6–10 or more per whorl; calyx densely hairy; corolla pink.

Where Found: Native to Eurasia; naturalized throughout North America; disturbed, fertile soils, usually in full or partial sun. Found throughout New York City, except in undisturbed natural areas.

Natural History: In their native range, the plants are an important source of nectar and pollen. Honeybees (*Apis mellifera*) and Bumble Bees (*Bombus pennsylvanicus*) are known to pollinate the flowers. Henbit Deadnettle is an alternate host for Tobacco Mosaic Virus. A single plant can produce up to 200 seeds.

Cultural History: The species has been recorded from New York since 1751.

Name Notes: The name "Henbit" is a corruption of the low German or Dutch "hoenderbeet". The word "amplexus" is Latin for embrace and the word "caulis" is Latin for stem, hence the epithet "amplexicaule" meaning stem-embracing, in reference to the upper leaves.

Species Notes: The species is sometimes confused with *Glechoma hederacea* (Ground Ivy), but the latter is a perennial from long creeping rhizomes (vs annual or biennial from taproot); has stalked flowers (vs sessile); calyx with 15 ribs (vs 5); upper corolla lobe not hooded (vs hooded).

Links: iNaturalist [observations](#) from New York City. [Specimens](#) from the Mid-Atlantic Herbaria Consortium. Global biotic [interactions](#) from GloBI.



***Lamium hybridum* Vill. – Cut-Leaved Deadnettle**

Description: Annual herb, branching from the base, the stems ascending. Leaves ovate, deeply incised, adjacent marginal teeth unequal, the upper leaves crowded, sub-sessile, pendent. Flowers 6–10 per whorl; corolla pink to purple with faint lines, the throat abruptly flared into a gibbous throat.

Where Found: Native to Eurasia, sparsely naturalized in North America; disturbed, fertile soils, usually in full or partial sun. Currently known only from a garden bed in the New York Botanical Garden and on a wall at the north end of Central Park.

Name Notes: The species was named in 1786 by the French physician and botanist, Dominique Villars who hypothesized that the plant was a hybrid between *Lamium purpureum* and *Lamium amplexicaule*.

Species Notes: Many floras of the 20th century synonymized the name under *Lamium purpureum*. But the study by Taylor (1991) based on morphological, cytological and biochemical data reaffirmed Villars' hypothesis from 1786 and made a strong case for hybrid origin involving *Lamium purpureum*, but rejecting the often posited other parent *Lamium amplexicaule*.

Links: iNaturalist [observations](#) from New York City. [Specimens](#) from the Mid-Atlantic Herbaria Consortium. Global biotic [interactions](#) from GloBI.



***Lamium purpureum* L. – Purple Deadnettle**

Description: Annual herb, branching from the base, the stems ascending. Leaves ovate, the margins crenate, adjacent marginal teeth equal, the upper leaves crowded, sub-sessile, pendent. Flowers 6–10 per whorl; corolla pink to purple with dark lines, the throat gradually flared into a gibbous throat.

Where Found: Native to Eurasia, naturalized throughout North America; disturbed, fertile soils, usually in full or partial sun. Occurs throughout New York City, especially in flower and vegetable gardens, often forming dense patches.

Natural History: In Europe, Honey Bees, Bumble Bees and Digger Bees visit the flowers for nectar. The species flowers exclusively from January through May. Unlike some other annual spring ephemerals, Purple Deadnettle is very reliable in the same habitat, coming back year after year in exactly the same place.

Cultural History: The species is edible raw or cooked.

Name Notes: The epithet and common name refers to the purple tint to the upper leaves.

Species Notes: The species is sometimes mistaken for *Prunella vulgaris* (Common Self Heal), but *Prunella vulgaris* has flowers in dense terminal spikes with bract-like leaves.

Links: iNaturalist [observations](#) from New York City. [Specimens](#) from the Mid-Atlantic Herbaria Consortium. Global biotic [interactions](#) from GloBI.