

Euonymus americanus L.
CELASTRACEAE

strawberry bush

Synonyms: *Euonymus alternifolius* Moench.
Euonymus americanus var. *angustifolius* (Pursh) Wood
Euonymus americanus var. *sarmentosus* Nutt.
Euonymus angustifolius Pursh
Euonymus heterophyllus Raf.
Euonymus muricatus Raf.
Euonymus sarmentosus G. Don
Euonymus sempervirens Marsh.

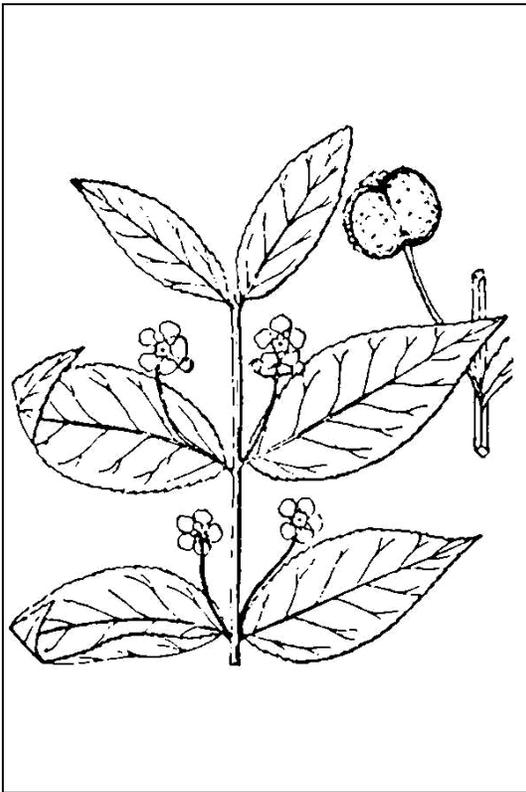


Illustration source: Britton and Brown 1913

General Description.—Strawberry bush is also known as bursting heart, hearts-a-bursting, or American burning bush. It is a low-growing, deciduous shrub, up to 2 m high. Its stems are stiff, green, glabrous, straight, round, 2 to 5 mm in diameter, and are occasionally four-angled. The pith is white, round, and continuous. The leaves of the strawberry bush are opposite (two per node), spaced somewhat evenly along stem. The petioles are short, less than 3 mm and sometimes are nearly absent, the leaves then appearing sessile or subsessile. The leaf blades are slightly leathery to papery, oblong to elliptic, 4.0 to 10 by 2.0 to 3.5

cm wide, with cuneate or attenuate bases, crenulate margins, and acuminate apices. The five to seven pairs of ascending lateral leaf veins disappear before reaching the margin. The flowers occur on the current season's growth in small axillary clusters (cymes), each cluster usually consisting of two peduncles, each with one to three flowers (often one or two of the flowers will abort, leaving only one functional flower per peduncle). The peduncles are slender, 1.5 to 2.2 cm long. When there is more than one flower per peduncle each flower is subtended by a short pedicel, 1 to 3.5 mm long. The flowers are bisexual, about 10 mm in diameter, with the sepals and petals readily distinguishable from one another. The calyx comprises five yellow to green sepals, 1.0 to 1.5 by 1.6 to 1.8 mm. The corolla comprises of five greenish to reddish petals up to 4 mm by 4 mm wide. There are five stamens, 1.5 to 2.0 mm long. The five carpels are fused. A sticky nectarous disk is present, 3 to 4 mm in diameter. The color and shape of the fruit gives it its common names. The fruit is a plump, red globose dry, five-lobed capsule up to 1.5 cm in diameter prior to opening. The surface of the capsule is densely covered with minute spines or warts on the surface. This species is the only species of *Euonymus* L. in North America to have a capsule with a spiny or warty surface. The capsule opens along the lobes, exposing the seeds that are covered by a fleshy, scarlet aril. The seeds (sans aril) are brown, glabrous, ellipsoid, 7 to 9 by 4.0 to 5.5 mm. Some spell the specific epithet "americana" instead of "americanus" used here. This is because botanists disagree as to whether the genus name *Euonymus* should be treated as feminine ("americana") or masculine ("americanus") (Paclt 1998). In classical Greek, the generic name was treated as feminine; however, Linnaeus treated the genus as masculine. The spelling "*Euonymus*" has formally

been conserved over Linnaeus's originally spelling "*Evonymus*," which has also occasionally been used (Gilstra 1991)

Range.—Strawberry bush occurs throughout much of the Eastern United States (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia and West Virginia), except New England. (Shetler and Orli 2000, USDA 2003) It is also known from Ontario (Gleason and Cronquist 1991, Ma 2001, Scoggan 1978).

Ecology.—Strawberry bush grows well in many soils types, up to 1 m in a growing season. It is usually found in forests and thickets, including lowland areas and edges of streams. It occurs from sea level up to 400 m in elevation (Ma 2001).

Reproduction.—Hymenopterous insects, especially bees, appear to be the main pollinators, although wind may also be involved (Brizicky 1964). The seeds of strawberry bush are dispersed by birds and other small mammals (Brizicky 1964). Strawberry bush blooms in late spring and early summer, and the fruits mature in autumn.

Growth and Management.—Strawberry bush prefers a humus-rich, slightly acidic soil. It does well in shady situations, tolerating even full shade. It can be planted in USDA Zones 5 to 9. Propagation can be effected through stem cuttings, layering and seed (Chittenden and Syngé 1956) Seeds require approximately 3 months of prechilling and stratification.

Benefits.—Strawberry bush is an excellent ornamental species. The leaves turn a dark red in autumn. The red capsules and scarlet arillate seeds add to the "burning effect" and contributes to some of its common names. Strawberry bush is best used in naturalistic settings, in the shade of larger shrubs and trees. Large specimens can have hundreds of the "bursting" red capsules. In the winter, the bright green twigs are also handsome.

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