

COMMON BUCKTHORN

[*Rhamnus cathartica* L.]
RHCA3



Habit: Deciduous shrub or tree to 8 m (26 ft) and as wide.^{7,17,4,3}

Reproduction: Primarily by seed; may sucker from base; dioecious.^{7,17,4}

Leaves: Elliptic to oblong/obovate, 3-7 cm (1¼-2¾ in); twice as long as wide; pinnately veined, lateral veins curving upward;^{7,14,17} opposite, some alternate, often abruptly pointed with rounded teeth (each bearing a gland^{14,18}) on the margin;^{7,17} upper surface dark green, lower light green;^{7,14,3} yellow/brown in fall;^{3,8} downy beneath if young;⁸ early leaf-out,⁹ late senescence; leaf lifespan exceeds that of native shrubs by 58 days.^{9,1,3}

Stems: Branches opposite (or nearly) at right angles to trunk;⁸ some twigs end in a short thorn;^{7,17,8,3,14} grayish/yellowish-brown, glabrous;^{3,14} trunk becomes scaly with age.^{18,14}

Flowers: Male 2-6 per cluster with 4 yellowish-greenish petals and sepals, 4 stamens; female 2-15 per cluster, usually without petals, if present, linear and yellowish-brown, 4 vestigial stamens, 4 green sepals shorter than those in the male;^{14,7,8} April-June;¹⁴ appear with the leaves;^{7,17} females at a 6 to 1 ratio to males; honey-scented; calyx tube with nectarial lining; insect pollinated (bees and flies).⁸

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Fruits/Seeds: Glossy black at maturity in late summer/early fall; fruit 0.5 cm (¼ in) in diameter; drupe contains 3-4 seeds;^{8,4,7,3,17} cold stratification may² or may not¹ be required; optimal germination at 20 or 30°C (68 or 86°F);² most fruit falls beneath females; bird dispersed, but not preferred (even in native habitat);⁸ seedling establishment more likely on ground with little herb cover;⁶ dormancy and seed bank still unclear.^{1,13}

Habitat: Native of Eurasia; introduced into the U.S. in 1880s;^{21,1} on calcareous soils in native habitat;^{8,1} open/shaded areas, roadsides, woodlands, riverbanks (not flooded⁵), pastures,^{1,12,17,19} and mature forests;⁹ tolerates various soil conditions.¹

Comments: An alternate host for oat crown/leaf rust¹⁵ and an overwintering host of soybean aphid;^{20,16} early leaf-out more important than late senescence for carbon gain;⁹ growth rates higher in light;¹⁰ leaves decompose more rapidly than some natives and are high in nitrogen;¹¹ USDA hardiness zones 3-7.³

Similar Native Species: *R. caroliniana*; flowers perfect and in parts of 5; leaves alternate.^{7,17}