***Rhamnus cathartica*** (**Buckthorn**, **Common Buckthorn** or **Purging Buckthorn**), is a species in the family [Rhamnaceae](http://en.wikipedia.org/wiki/Rhamnaceae), native to [Europe](http://en.wikipedia.org/wiki/Europe), northwest [Africa](http://en.wikipedia.org/wiki/Africa), and western [Asia](http://en.wikipedia.org/wiki/Asia), from the central [British Isles](http://en.wikipedia.org/wiki/British_Isles) south to [Morocco](http://en.wikipedia.org/wiki/Morocco), and east to [Kyrgyzstan](http://en.wikipedia.org/wiki/Kyrgyzstan).[[1]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-fe-0)[[2]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-grin-1) It was introduced to North America as an ornamental shrub in the early 19th century or perhaps before.[[3]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-2)[[4]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-3)

|  |
| --- |
| **Contents**   [[hide](http://en.wikipedia.org/wiki/Rhamnus_cathartica)]   * [1 Description](http://en.wikipedia.org/wiki/Rhamnus_cathartica#Description) * [2 Cultivation](http://en.wikipedia.org/wiki/Rhamnus_cathartica#Cultivation) * [3 Cultivation and uses](http://en.wikipedia.org/wiki/Rhamnus_cathartica#Cultivation_and_uses) * [4 Invasive species - North America](http://en.wikipedia.org/wiki/Rhamnus_cathartica#Invasive_species_-_North_America) * [5 References](http://en.wikipedia.org/wiki/Rhamnus_cathartica#References) * [6 External links](http://en.wikipedia.org/wiki/Rhamnus_cathartica#External_links) |

**[**[**edit**](http://en.wikipedia.org/w/index.php?title=Rhamnus_cathartica&action=edit&section=1)**] Description**

*Rhamnus cathartica* is a [deciduous](http://en.wikipedia.org/wiki/Deciduous) [shrub](http://en.wikipedia.org/wiki/Shrub) or small tree growing up to 10 m tall, with grey-brown bark and spiny branches. The [leaves](http://en.wikipedia.org/wiki/Leaf) are elliptic to oval, 2.5–9 cm long and 1.2–3.5 cm broad; they are green, turning yellow in autumn, and are arranged somewhat variably in opposite to subopposite pairs or alternately. The [flowers](http://en.wikipedia.org/wiki/Flower) are yellowish-green, with four petals; they are [dioecious](http://en.wikipedia.org/wiki/Plant_sexuality) and insect pollinated. The [fruit](http://en.wikipedia.org/wiki/Fruit) is a globose black [drupe](http://en.wikipedia.org/wiki/Drupe) 6–10 mm diameter containing two to four [seeds](http://en.wikipedia.org/wiki/Seed); it is mildly [poisonous](http://en.wikipedia.org/wiki/Poison) for people, but readily eaten by [birds](http://en.wikipedia.org/wiki/Bird), which disperse the seeds in their droppings.[[5]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-rushforth-4)[[6]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-fnwe-5)

**[**[**edit**](http://en.wikipedia.org/w/index.php?title=Rhamnus_cathartica&action=edit&section=2)**] Cultivation**

The Common Buckthorn, *Rhamnus cathartica*, is shade-tolerant, moderately fast-growing and short-lived. This species is a tough, durable tree which adapts to urban or [suburban](http://en.wikipedia.org/wiki/Suburban) environments, and virtually any area it is dispersed in. It is widely regarded as a major [invasive species](http://en.wikipedia.org/wiki/Invasive_species) whose shade prevents the establishment of native trees or shrubs. It has become the target of efforts to eradicate it from home sites, parks and woodland areas. It is difficult to control because it sprouts vigorously and repeatedly from the root collar following cutting, girdling, or burning,[[7]](http://en.wikipedia.org/wiki/Rhamnus_cathartica" \l "cite_note-6) though it can be controlled by applying concentrated herbicide to the cut stem.

The species was originally named by [Linnaeus](http://en.wikipedia.org/wiki/Linnaeus) as *Rhamnus catharticus*, but this spelling was corrected to *cathartica* as the genus name *Rhamnus* is of feminine gender.[[8]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-bean3-7)

**[**[**edit**](http://en.wikipedia.org/w/index.php?title=Rhamnus_cathartica&action=edit&section=3)**] Cultivation and uses**

The bark and fruit were used as a [purgative](http://en.wikipedia.org/wiki/Purgative) in the past, though their potentially dangerous violent action and side effects means they are now rarely used.[[9]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-pfaf-8)

The wood is hard and dense, but little-used.

It is a food plant of the [Brimstone butterfly](http://en.wikipedia.org/wiki/Brimstone_butterfly). The sulphur-yellow males are indicative of the plant's presence.

This species is the alternate host for the important rust disease of cerals caused by [Puccinia coronata](http://en.wikipedia.org/wiki/Puccinia_coronata). *R. cathartica* is also the primary overwintering host in North America for an important agricultural pest of [soybeans](http://en.wikipedia.org/wiki/Soybean), the [soybean aphid](http://en.wikipedia.org/wiki/Soybean_aphid).[[10]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-9)

**[**[**edit**](http://en.wikipedia.org/w/index.php?title=Rhamnus_cathartica&action=edit&section=4)**] Invasive species - North America**

The species is [naturalised](http://en.wikipedia.org/wiki/Naturalisation_(biology)) and sometimes [invasive](http://en.wikipedia.org/wiki/Invasive_plant) in parts of [North America](http://en.wikipedia.org/wiki/North_America).[[2]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-grin-1)[[11]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-MNDNR-10)[[12]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-11) *R. cathartica* has a competitive advantage compared to native trees and shrubs in North America because it leafs out before native species.[[13]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-12) Soil in woodlands dominated by *R. cathartica* was higher in [nitrogen](http://en.wikipedia.org/wiki/Nitrogen), [pH](http://en.wikipedia.org/wiki/PH), and water content that soil in woodlands relatively free of *R. cathartica*,[[14]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-13)[[15]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-14) probably because *R. cathartica* has high levels of [nitrogen](http://en.wikipedia.org/wiki/Nitrogen) in its leaves and these leaves rapidly decompose.

*R. cathartica* is also associated with invasive European earthworms (*[Lumbricus](http://en.wikipedia.org/wiki/Lumbricus" \o "Lumbricus)* sp.) in the northern Midwest.[[16]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-15) Removing *R. cathartica* led to a decrease of invasive earthworm biomass of around 50%. [[17]](http://en.wikipedia.org/wiki/Rhamnus_cathartica#cite_note-16)