GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Cotinus coggygria***

Cotinus coggygria 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Sapindales	Anacardiaceae

Common name wig tree (English), smoke bush (English), smoke tree (English), European smoketree (English), young fustic (English), Hungarian fustic (English), Venetian-sumac (English), fustet (English), festete (Spanish)

Synonym *Rhus cotinus*

Similar species *Cotinus obovatus*

Summary Native to Asia and southeastern Europe, *Cotinus coggygria* is a shrub that occurs naturally in areas with rocky soil and poor soils.

view this species on IUCN Red List

Species Description
Cotinus coggygria is a deciduous shrub with a rounded or irregular shape. It generally grows to 3.6-4.6 metres tall and 2.4-4.3 metres wide. In the summer,*C. coggygria* exhibits simple, alternate, bluish-green leaves of oval or obvate shape, ranging in size from 3.8cm-8.9cm. In the fall, *C. coggygria* foilage changes to an attractive mix of yellow, orange, and red. *C. coggygria* begins to flower in June, exhibiting small yellow-green flowers with panicles ranging from 15.2cm-20.3cm (UConn, undated). UConn (undated) notes that the trees' characteristic look is derived \"from plumy hairs on the sterile flowers.\" *C. coggygria* stems are smooth and purple or brown in colour. The older bark is light grey (UConn, undated).

Lifecycle Stages
The panicles of *Cotinus coggygria* change colour as they age between June and September. At their peak, the panicles cover the plant in a smokey pink plume, an aesthetically pleasing arrangement from which *C. coggygria* derives its common name of 'smoketree' (UConn, undated).

Uses
Cotinus coggygria is valuable to humans in a variety of ways. An orange dye can be rendered from the roots and stems of *C. coggygria*, and its leaves and bark are a good source of tannins. As a medicinal plant, the yellow wood of *C. coggygria* can be steeped and used as a coagulant, fever reducer, or as a treatment for eye ailments (PFAF, 2004). Ivanova (2004) investigated medicinal uses of Bulgarian plants and found *C. coggygria* to have antioxidant capabilities greater than those of black, green, and rooibos teas. Famine Foods (1998) notes that in times of distress,the shoots and ripe fruits of *C. coggygria* is used as an emergency food source in China and the Garwhal Himalyas of India, respectively. As a landscaping plant, *C. coggygria* is touted for its abiltiy to thrive in dry, difficult conditions, as well as its attractive, late summer flowering (UConn, undated). Becuase it has little need for pruning or maintainence, it is recomended extensively for urban uses such as parking lot island and median strips (Gilman and Watson, 1993). *C. coggygria* also tranplants well, due to its fibrous root system (PFAF, 2004).

Habitat Description
Cotinus coggygria tolerates a broad range of soil types, from light sandy soils to heavy clays. (Floridata, 2007). *C. coggygria* also tolerates a wide range of soil ph, from 3.7-6.3. *C. coggygria* can grow in partial shade to full sun, and it tolerates wet, moist or dry soils. (VCE,1989). When occuring naturally, *C. coggygria* frequently grows on gravely, dry soils, particularly on south-facing limestone slopes (Illyes, undated).

Reproduction
For *Cotinus coggygria* to produce seeds, sexual reproduction is necessary. *C. coggygria* can also be propagated from cuttings, although some cultivars are difficult to root (Floridata, 2007). Floridata (2007) recomends taking heel or nodal cuttings in late summer and treating them with rooting powder.

General Impacts
In oak forests of Slovenia where it has been introduced *Cotinus coggygria* frequently acts as a substrate species for the insect Nueroptera (Devetak,2002).

Management Info
Biological: Although specific research related to control of *C. coggygria* has not been carried out, the plant may be affected by rusts, leafspot, verticillium wilt, or San Jose scale (Floridata, 2007) These agents could be employed as a biological control mechanism. Floridata (2007) notes that *C. coggygria* is largely resistant to honeydew fungus.

Pathway
Likely introduced to US as result of 19th century trade with China.

Principal source: University of Connecticut (Uconn). Undated. *Cotinus coggygria*; Floridata. 2007. Online database. *Cotinus coggygria*

Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

Review:

Pubblication date: 2007-08-03

ALIEN RANGE

[1] CZECH REPUBLIC
[1] UNITED KINGDOM
[1] GERMANY
[7] UNITED STATES

BIBLIOGRAPHY
13 references found for **Cotinus coggygria**

Managment information
Gilman, E and Watson, D., 1993 . *Cotinus coggygria Smoketree. University of Florida, 1993.*
Summary: This website provides details on all aspects of the plant, including physical descriptions of the trunk, branches, foilage, flowers. It also discusses diseases and pest issues.
Available from: http://hort.ufl.edu/trees/taxon.htm [Acessed 9 April 2007]
USDA, ARS, 2007. Online database. *Cotinus coggyrgria* National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland
Summary: This website provided detailed description related to the worldwide distribution of the plant.
Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?11697 [Acessed 9 April 2007]

General information

Devetak, D. Neuroptera in Oak Forests in the Submediterranean District of Slovenia. Acta Zoologica Academiae Scientiarum Hungaricae 48 (Suppl. 2), pp. 67–73, 2002
Summary: This journal article discusses the habits of the insect neuroptera and investigates its relationship with *Cotinus coggygria*.
Available from: http://www.nhmus.hu/publication/actazool/48Suppl2/devetak.pdf [Acessed 9 April 2007]
Famine Foods. 1998. Online database. *Cotinus coggygria*
Summary: This website provided information on plant species that are eaten in times of distress. The species listed on this site are consumed only in times of famine. The exhaustive list incorporates plants from all over the world.
Available from: http://www.hort.purdue.edu/newcrop/faminefoods/ff_families/ANACARDIACEAE.html [Acessed 9 Apil 2007]
Floridata. 2007. Online database. *Cotinus coggygria*
Summary: This detailed website lists common names, offers physical descriptions of the plant and its cultivars, and outlines specific soil, nutritional, and light needs. It also outlines possible horticultural and ornamental uses for the plant and discusses pest issues.
Available from: http://www.floridata.com/ref/C/coti_cog.cfm [Accessed 9 April 2007]
ITIS (Integrated Taxonomic Information System), 2005. Online Database *Cotinus coggygria*
Summary: An online database that provides taxonomic information, common names, synonms, and geographical jurisdiction of a species. In addition, links are porvided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and Bioscience from BioOne journals.
Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=28800 [Acessed 9 April 2007]
Ivanova *et al* . Polyphenols and antioxidant capacity of Bulgarian medicinal plants. Journal of Ethnopharmacology Volume 96, Issues 1-2, ppg 145-15, 2005.
Summary: This journal article investigates the antioxidant abilities of traditional Bulgarian medicinal plants. *Cotinus coggygria* was found to have strong antioxidant capabilities.
Plants for a Future. 2004. Online database *Cotinus coggygria*
Summary: This website provides general information about the plant, common names, and discusses various food, medicinal, and traditional uses for the organism.
Available from: http://www.pfaf.org/database/plants.php?Cotinus+coggygria [Acessed 9 April 2007]
Pysek *et al*. 2002. Catalogue of alien plants of the Czech Republic Preslia, Praha, 74: 97–186, 2002.
Summary: This artile catalouges non-native plants found in the Czech Republic.
Available from: http://www.ibot.cas.cz/personal/pysek/pdf/catalogue_preslia%202002.pdf [Acessed 9 April 2007]
Schlueter, H. On the naturalization of *Cotinus coggygria* Scop. to a xerothermic shell limestone near Jena in Thuringia. Phytocoenologia. Vol. 23, pp. 637-650. 1993.
Summary: This article discussed the natural habitual preferences of the plant.
University of Connecticut (Uconn). Undated. *Cotinus coggygria*
Summary: This website gives a general overview of the plants habits, physical appearance, uses, and methods of cultivation.
Available from: http://www.hort.uconn.edu/plants/c/cotcog/cotcog1.html [Accessed 9 April 2007]
USDA, NRCS. 2007. The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. *Cotinus coggygria*
Summary: Available from http://plants.usda.gov/java/profile?symbol=COCO10 [Accessed 9 April 2007]
Virginia Cooperative Extension. 1989. Online database *Cotinus coggygria*
Summary: This website provides a brief detailed description of cultural needs of the organisim. It mentiones specific acceptable pH ranges for the plant.
Available from: http://www.ext.vt.edu/departments/envirohort/factsheets/shrubs/smkbsh.html [Acessed 9 April 2007]