

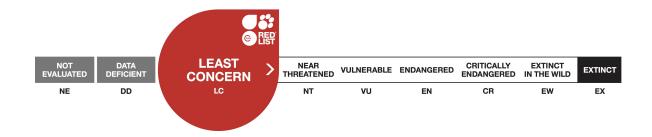
IUCN 2019: T66816454A66816456

Scope: Global Language: English



# Pterocarya stenoptera, Chinese wingnut

Assessment by: Song, Y., Bétrisey, S. & Kozlowski, G.



View on www.iucnredlist.org

**Citation:** Song, Y., Bétrisey, S. & Kozlowski, G. 2019. *Pterocarya stenoptera*. The IUCN Red List of Threatened Species 2019: e.T66816454A66816456. <a href="http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T66816454A66816456.en">http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T66816454A66816456.en</a>

Copyright: © 2019 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see <u>Terms of Use</u>.

The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership. The IUCN Red List Partners are: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with feedback so that we can correct or extend the information provided.

## **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Fagales	Juglandaceae

**Taxon Name:** Pterocarya stenoptera C.DC.

Common Name(s):

• English: Chinese wingnut

### **Assessment Information**

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2019

Date Assessed: January 11, 2019

#### Justification:

Pterocarya stenoptera is native to China with adjacent subpopulations in Taiwan island and northern Viet Nam. It is assessed as Least Concern due to its large distribution area and abundance in riparian ecosystem across China. Change in land use and transformation of river-banks represent the main threats to the species. Due to its abundance in China and its strong capacity to colonize riparian habitats and its large distribution, the species is not under threat at a global scale.

# **Geographic Range**

#### **Range Description:**

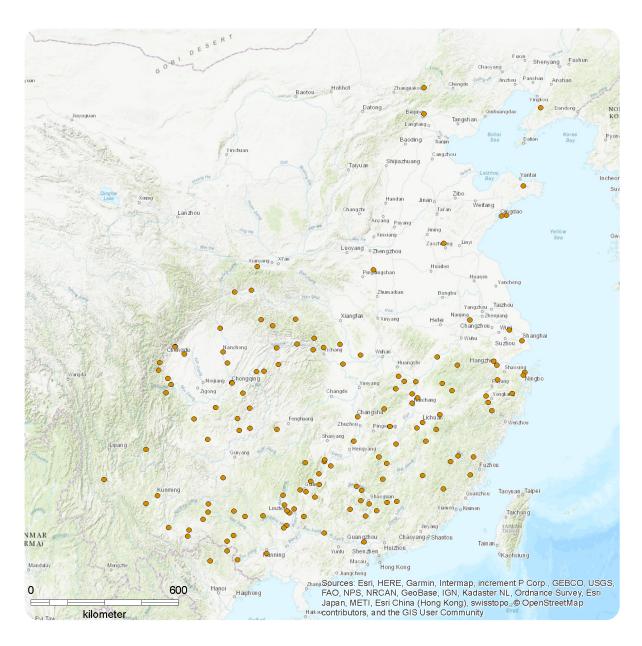
Pterocarya stenoptera is widely distributed across China, where it occurs in 20 provinces: Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan and Zhejiang provinces (Zheng and Raven 2003, Fang et al. 2003, Chinese Virtual Herbarium (CVH)). The species is also present in Taiwan island and northern Viet Nam (Kozlowski et al. 2018). It has an estimated extent of occurrence (EOO) of 2,773,344 km².

#### **Country Occurrence:**

**Native:** China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang); Taiwan, Province of China; Viet Nam

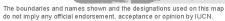
# **Distribution Map**

#### Pterocarya stenoptera



Range Extant (resident) Compiled by: GTA







## **Population**

The total population is important and widespread across China. The species is sometimes dominant in riparian habitats and can recolonize quickly degraded riparian environment. The current population trend is considered to be stable and probably growing in different parts of its distribution. Most of the known subpopulations of this species are important with hundreds or thousands of individuals each.

**Current Population Trend: Stable** 

## Habitat and Ecology (see Appendix for additional information)

Pterocarya stenoptera is a large tree which can reach heights of up to 30 m and grows mainly in valleys and along rivers, in warm, temperate and subtropical zones with deep, fertile, moist soils (Kozlowski et al. 2018). The species is also present in forests on mountain slopes from sea level to 1,500 m asl (Zheng and Raven 2003, Kozlowski et al. 2018).

**Systems:** Terrestrial

### Use and Trade

Pterocarya stenoptera is used for forest plantations in China and is also appreciated in landscape architecture (Kozlowski et al. 2018). In Chinese medicine, the species has several uses in treating chronic bronchitis, joint pain, itching due to scabies, dermatitis and eczema, burns and scalds (Kozlowski et al. 2018).

## **Threats** (see Appendix for additional information)

The main threats to Pterocarya stenoptera include habitat loss and transformation or artificialization of river banks. However, the species is able to recover and recolonize rapidly riparian environment, thanks to very effective seed dispersal and germination combined to important clonal propagation.

# **Conservation Actions** (see Appendix for additional information)

Pterocarya stenoptera has not been evaluated in the China Plant Red Data Book (Li-Kuo and Jian-Ming 1992) and is not included in the 1999 State Council of China list of National Key Protected Wild Plants. The species is common in cultivation in botanical gardens. The species is held in 119 collections from across the globe (BGCI 2019).

3

#### Credits

Song, Y., Bétrisey, S. & Kozlowski, G. Assessor(s):

Reviewer(s): Harvey-Brown, Y. & Rivers, M.C.

## **Bibliography**

BGCI. 2019. Botanic Gardens Conservation International (BGCI) - Plant Search. Available at: <a href="https://tools.bgci.org/plant\_search.php">https://tools.bgci.org/plant\_search.php</a>.

CVH (Chinese Virtual Herbarium). 2018. Chinese Virtual Herbarium. Available at: <a href="http://www.cvh.org.cn/en">http://www.cvh.org.cn/en</a>. (Accessed: 2018).

Fang, J., Wang, Z. and Tang, Z. 2011. Atlas of Woody Plants in China. Higher Education Press, Beijing.

IUCN. 2019. The IUCN Red List of Threatened Species. Version 2019-3. Available at: <a href="www.iucnredlist.org">www.iucnredlist.org</a>. (Accessed: 10 December 2019).

Kozlowski, G., Bétrisey, S. and Song, Y-G. 2018. *Wingnuts* (Pterocarya) *and walnut family. Relict trees: linking the past, present and future.* Natural History Museum Fribourg, Switzerland.

Li-kuo, F. and Jian-ming, J. 1992. *China Plant Red Data Book – Rare and Endangered Plants 1*. Science Press, Beijing.

Zheng, Y.W. and Raven, P.H. 2003. Zelkova. Flora of China. Vol. 5. Ulmaceae – Basellaceae. Missouri Botanical Garden Press, St. Louis.

### Citation

Song, Y., Bétrisey, S. & Kozlowski, G. 2019. *Pterocarya stenoptera*. The IUCN Red List of Threatened Species 2019: e.T66816454A66816456. <a href="http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T66816454A66816456.en">http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T66816454A66816456.en</a>

### Disclaimer

To make use of this information, please check the **Terms of Use**.

### **External Resources**

For Images and External Links to Additional Information, please see the Red List website.

# **Appendix**

## **Habitats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	-	Suitable	-
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	Suitable	-

## **Plant Growth Forms**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Plant Growth Forms	
Tree - large	

## **Threats**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
Residential & commercial development -> 1.1.     Housing & urban areas	Ongoing	-	=	-
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	-	-	-

# **Conservation Actions in Place**

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place	
In-Place Land/Water Protection and Management	
Occur in at least one PA: Unknown	
In-Place Species Management	
Subject to ex-situ conservation: Yes	

## **Additional Data Fields**

### Distribution

Estimated extent of occurrence (EOO) (km²): 2773344

Lower elevation limit (m): 0

Upper elevation limit (m): 1500

## **Habitats and Ecology**

Generation Length (years): 20-30

# The IUCN Red List Partnership



The IUCN Red List of Threatened Species<sup>™</sup> is produced and managed by the <u>IUCN Global Species</u>

<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

The IUCN Red List Partners are: <u>Arizona State University</u>; <u>BirdLife International</u>; <u>Botanic Gardens Conservation International</u>; <u>Conservation International</u>; <u>NatureServe</u>; <u>Royal Botanic Gardens, Kew</u>; <u>Sapienza University of Rome</u>; <u>Texas A&M University</u>; <u>and Zoological Society of London</u>.