Pterocarya rhoifolia, Japanese wingnut

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

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Taxonomy

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantae</td>
<td>Tracheophyta</td>
<td>Magnoliopsida</td>
<td>Fagales</td>
<td>Juglandaceae</td>
</tr>
</tbody>
</table>

Taxon Name: *Pterocarya rhoifolia* Siebold & Zucc.

Common Name(s):
- English: Japanese wingnut

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1
Year Published: 2019
Date Assessed: January 16, 2019

Justification:

*Pterocarya rhoifolia* is native to Japan and exhibits a large distribution across the country (Kyushu, Shikoku, Honshu and Southern Hokkaido). The species is assessed as Least Concern due to its large distribution area and abundance in the riparian environment in Japan. Degradation and artificialization of river-banks represent the main threats to the species. Due to its strong capacity to colonize riparian habitats and its large distribution, the species is not under threat on a global scale.

Previously Published Red List Assessments

2019 – Least Concern (LC)
http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T66816434A143485899.en

Geographic Range

Range Description:

*Pterocarya rhoifolia* is a native tree from Japan, widely distributed in the different islands of the country (Kyushu, Shikoku, Honshu and Southern Hokkaido). It is one of the main components of riparian forests in Japan (Kozlowski et al. 2018). The literature often refers to the presence of a disjunct population from China in Laoshan, East Shandong (Zheng and Raven 2003, Fang et al. 2003, Chinese Virtual Herbarium (CVH)). Nevertheless, there are no reliable records of this species in herbaria nor is it confirmed by local botanists (Kozlowski et al. 2018). It has an estimated extent of occurrence (EOO) of 507,155 km².

Country Occurrence:

Native: Japan (Hokkaido, Honshu, Kyushu, Shikoku)
Population
The total population is important and widespread across Japan. The species could be dominant along rivers and streams. The current population trend is unknown.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)
*Pterocarya rhoifolia* is a tree species which can reach heights of up to 30 m and grows mainly along riverbanks and mountain streams (Zheng and Raven 2003). This species needs a moist, wet environment and occupies niches next to the water, usually from 600 to 1,600 m asl, but the species could also be present at lower elevations (Kozlowski et al. 2018). Juvenile trees often wait for an opening in the canopy to grow into adult trees and the species is able to dominate floodplains and landslides after a major disturbance (Kozlowski et al. 2018).

**Systems:** Terrestrial

Use and Trade
*Pterocarya rhoifolia* is an important landscape species in Japan, particularly used in wet and riparian habitats or parks along small streams and rivers.

Threats (see Appendix for additional information)
*Pterocarya rhoifolia* is still common in riparian habitats in Japan and can be dominant along rivers and streams. Nevertheless, its habitat faces some threats, especially artificialization and degradation of natural banks.

Conservation Actions (see Appendix for additional information)
*Pterocarya rhoifolia* is not listed as threatened in Japan (Japan Integrated Biodiversity Information System 2007). The species is common in cultivation in botanic gardens and parks in Japan. The species is held in at least 64 collections from across the globe (BGCI 2019).

Credits
Assessor(s): Song, Y., Kozlowski, G. & Bétrisey, S.
Reviewer(s): Harvey-Brown, Y. & Rivers, M.C.
Bibliography


Citation


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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)

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Season</th>
<th>Suitability</th>
<th>Major Importance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Forest -&gt; 1.4. Forest - Temperate</td>
<td></td>
<td>Suitable</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Plant Growth Forms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree - large</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Threat</th>
<th>Timing</th>
<th>Scope</th>
<th>Severity</th>
<th>Impact Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Transportation &amp; service corridors -&gt; 4.1. Roads &amp; railroads</td>
<td>Ongoing</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Human intrusions &amp; disturbance -&gt; 6.3. Work &amp; other activities</td>
<td>Ongoing</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Conservation Actions in Place
(http://www.iucnredlist.org/technical-documents/classification-schemes)

<table>
<thead>
<tr>
<th>Conservation Actions in Place</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>In-Place Species Management</td>
<td></td>
</tr>
<tr>
<td>Subject to ex-situ conservation: Yes</td>
<td></td>
</tr>
</tbody>
</table>

Additional Data Fields

<table>
<thead>
<tr>
<th>Distribution</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Estimated extent of occurrence (EOO) (km²): 507155</td>
<td></td>
</tr>
<tr>
<td>Lower elevation limit (m): 600</td>
<td></td>
</tr>
<tr>
<td>Upper elevation limit (m): 1600</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Habitats and Ecology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Length (years): 20-30</td>
<td></td>
</tr>
</tbody>
</table>

http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T66816434A158965576.en
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