



Ghent University Botanical Garden

Stewartia L. (Theaceae)

**VEGETATIVE KEY TO SPECIES
CULTIVATED IN WESTERN EUROPE**

Jan De Langhe

(7 October 2008 - 12 January 2012)

Vegetative key.

This key is based on characteristics visible during the longest period of the year.

List of taxa and synonyms: see page 3.

To improve accuracy:

- **Examine only mature leaves** unless otherwise mentioned.
Depending the taxon, all other leaves can differ enormously in size and shape!!!
Juvenile specimens can key out wrong, also exclude strong shoots.
- Beware of hybridisation, especially with plants raised from seed gathered in collections.

Features based on:

- JDL herbarium specimens
- living specimens, in various arboreta, botanic gardens and collections, especially these from wild origin
- literature:

Bean, W.J. - (1981) - *Stewartia* (as '*Stuartia*') in *Trees and Shrubs hardy in the British Isles I*, p. 507-513.
de Spoelberch, P. - (2002) - Les stewartias à feuilles caduques rustiques en Europe de l'Ouest. *Belgische Dendrologie Belge* 2001, p. 8-22.
Hillier, J. & Coombes, A. - (2002) - *Stewartia* in *The Hillier Manual of Trees & Shrubs*, p. 355-356.
Hsu E., Boland T. & Camelbeke K. - (2008) - *Stewartia* in *cultivation*. *The Plantsman* 7, p. 78-87.
Krüssmann, G. - (1978) - *Stewartia* in *Handbuch der Laubgehölze* vol. 3, p. 384-386.
Kurata. - (1964) - *Stewartia* in *Illustrated Important Forest Trees Of Japan*, vol. 1, p. 180-181.
Kurata. - (1968) - *Stewartia* in *Illustrated Important Forest Trees Of Japan*, vol. 2, p. 128-129.
Kurata. - (1971) - *Stewartia* in *Illustrated Important Forest Trees Of Japan*, vol. 3, p. 100-101.
Ohwi. - (1965) - *Stewartia* *Flora of Japan*, p. 628-629.
Bartholomew, B., & Min, T. - (2007) - *Stewartia* in *Flora of China*, vol. 12, p. 424-429.
Rehder, A. - (1940) - *Stewartia* in *Manual of cultivated trees and shrubs hardy in North America*, p. 634-635.
Spongberg, S.A. - (1974) - A review of deciduous-leaved species of *Stewartia* (Theaceae). *J. Arnold Arbor.* 55, p. 182-214.

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<http://www.plantentuin.ugent.be>

- 01 a Plant evergreen, lamina +/- leathery and thick. **S. pteropetiolata**
 b Plant deciduous, lamina not leathery, thin. 02
- 02 a Bark often smooth and/or attractive flaking/peeling, later with alternating pale (crème to beige) and dark (cinnamon- to reddish brown) patches not unlike a London Plane bark. 03
 b Bark striate, fissured or ridged later, pale grey to sombre greyish brown. 05
- 03 a Lamina LS shiny, tertiary venation obscure. **S. monadelpha**
S. pseudocamellia hybrid, lamina often larger, LS +/- shiny and venation obscure. **S. xhenryae**
 b Lamina LS dull and reticulate. 04
- 04 a Lamina (broadly) elliptic. **S. pseudocamellia**
S. monadelpha hybrid, lamina often smaller, LS +/- shiny and venation obscure. **S. xhenryae**
 b Lamina elliptic to lanceolate. **S. sinensis**
 Trunk fissured at base, with flaking and smooth parts higher up. **S. rostrata x S. sinensis**
- 05 a Lamina margin regularly and finely dentate (sometimes basal 1/3 +/- entire) LS and margin glabrous or finely adpressed pubescent. 06
 b Lamina appearing entire but distantly and minutely dentate, LS and margin clearly loosely pubescent. 07
- 06 a Lamina LS tertiary veins prominent **AND** noticeable by touch. **S. serrata**
 b Lamina LS tertiary veins visible but not noticeable by touch. **S. rostrata**
 Trunk fissured at base, with flaking and smooth parts higher up. **S. rostrata x S. sinensis**
- 07 a Bark striate to fissured. Petiole ≤5 mm. **S. malacodendron**
 b Bark deeply ridged. Petiole 5-10(-15) mm..... **S. ovata**

List of taxa treated in this identification key.

S. ×henryae (*S. monadelpha* × *S. pseudocamellia*)
S. malacodendron
S. monadelpha
S. ovata
S. pseudocamellia

S. pteropetiolata
S. rostrata
S. rostrata × *S. sinensis*
S. serrata
S. sinensis

List of taxa referred to synonymy in this identification key.

S. gemmata = *S. sinensis*
S. koreana = *S. pseudocamellia*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	cm
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