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:

Rehder, A. - (1940) - Stewartia in Manual of cultivated trees and shrubs hardy in North America, p. 634-635.

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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. × henryae

   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. × henryae

   b Lamina elliptic to lanceolate. .................................................................................. S. sinensis

   Trunk fissured at base, with flaking and smooth parts higher up. ......................... S. rostrata × 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 × 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. pteropetiolata
S. malacodendron  S. rostrata
S. monadelpha  S. rostrata × S. sinensis
S. ovata  S. serrata
S. pseudocamellia  S. sinensis

List of taxa referred to synonymy in this identification key.

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