

Studiedag over het genus *Stewartia* (Theaceae) Journée d'étude sur le genre *Stewartia* (Theaceae)

Zondag 16 oktober 2011
Dimanche 16 octobre 2011

2. Philippe de Spoelberch:

**Identification des *Stewartia* avec les clés de
détermination du Dr. S. Spongberg (FR)**



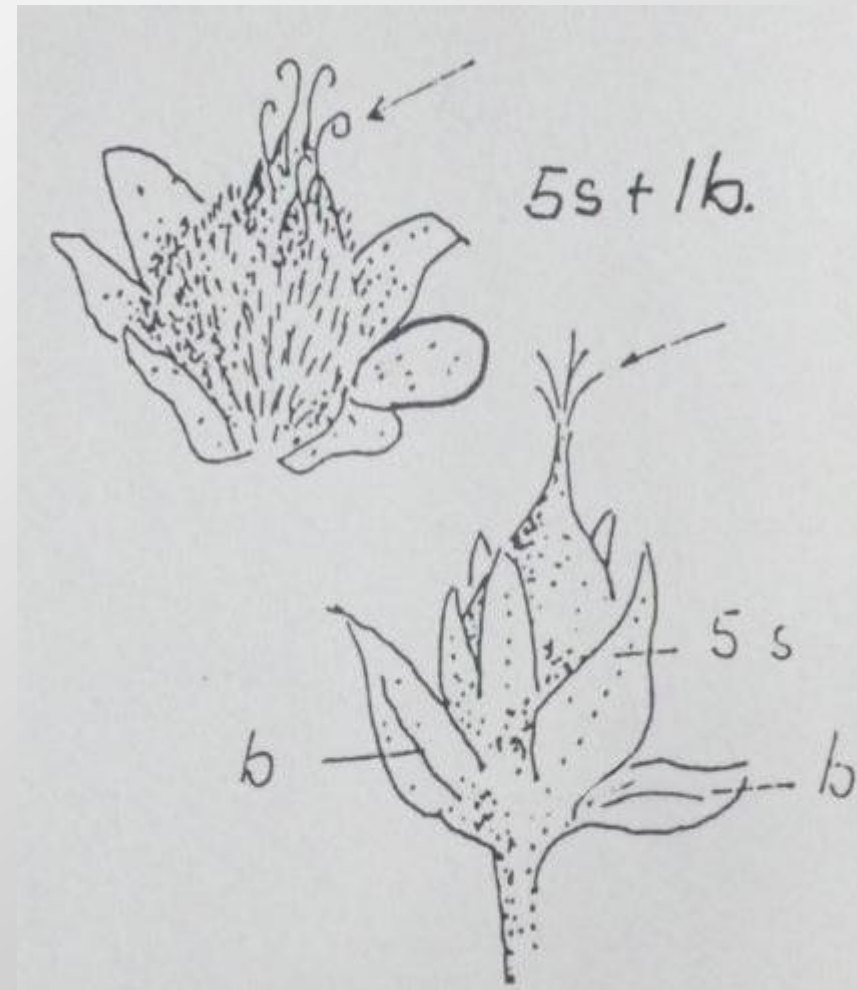
Keys to the deciduous species of the genus *Stewartia*

Following Dr. S. Spongberg in **Review of *Stewartia***
Journal of the Arnold Arboretum
Vol. 55, 1974 pp 189, 190

Illustrations by P. de Spoelberch

A.1 Styles 5, distinct;
petioles widely winged,
enclosing the lateral and
terminal buds; 2 floral
bracts soon dropping off
.....1. ***S. ovata***.

A.2 Styles united,
terminating in 5 or 6
stigmatic crests or arms;
petioles narrowly winged,
not enclosing the lateral
and terminal buds; floral
bracts 2B.



Stewartia ovata



5 distinct styles

Stewartia ovata



Petiole widely winged, enclosing the bud

Stewartia ovata



Apparently five sepals and one bract (as reported in general literature), but on close observation ...

Stewartia ovata



... a seventh can be seen, soon falling off, at the base of the flower,

***Stewartia ovata* 'White Satin' - 10 July 2004 -**



Opening flower bud, curiously set bract and sepals

***Stewartia ovata* 'Grandiflora' – AW 96073-klm**



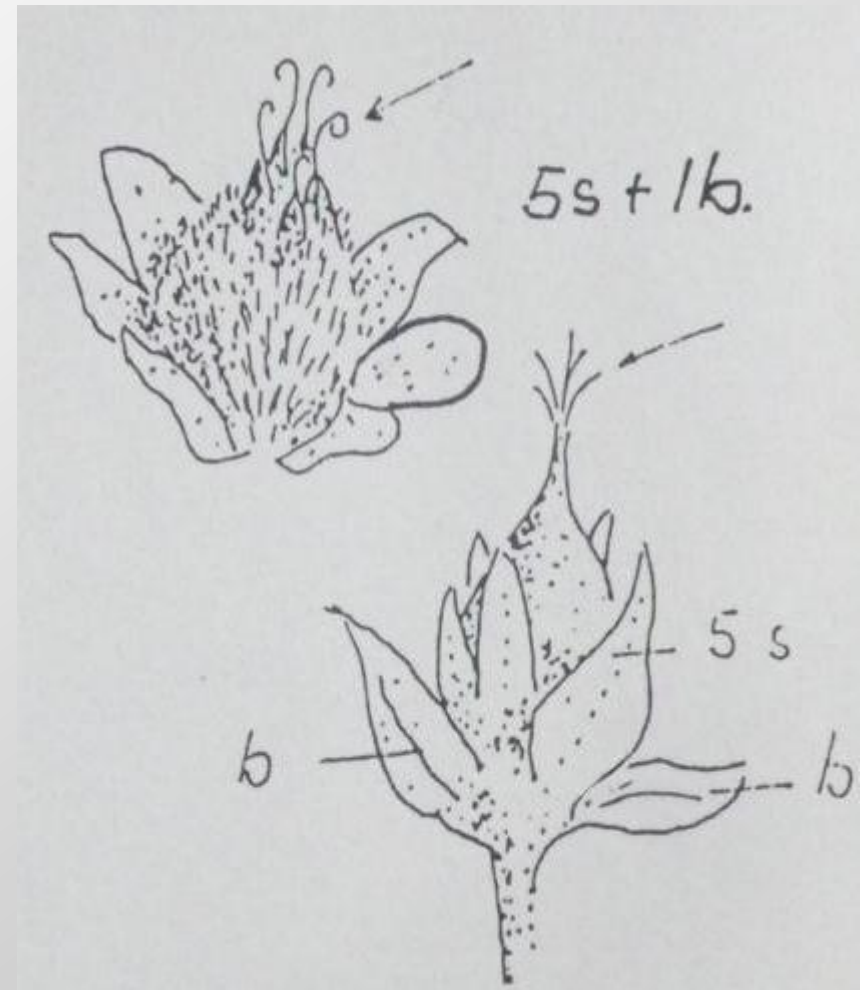
bracts, soon dry off, leaving 5 sepals

Stewartia ovata, beautiful flowers, early July



A.1 Styles 5, distinct;
petioles widely winged,
enclosing the lateral and
terminal buds; floral
bract1. ***S. ovata***.

A.2 Styles united,
terminating in 5 or 6
stigmatic crests or arms;
petioles narrowly
winged, not enclosing
the lateral and terminal
buds; floral bracts 2 ...B.



B. 1 Stamens with purplish filaments and bluish
anthers; capsules dehiscent by the outward folding of
the valve margins, the apices of the valves $\pm$
coherent; seeds angular... .. 2. ***S. malacodendron***

B. 2 Stamens with whitish filaments and yellow or
orange anthers; capsules apically dehiscent, the
valves spreading apart from the apex; seeds
planoconvex C.

Stewartia malacodendron



Stamens with purplish filaments and bluish anthers

Stewartia malacodendron



Bluish anthers

Stewartia malacodendron

B.1 Stamens with purplish
filaments and bluish anthers;

capsules dehiscent by the
outward folding of the valve
margins, the apices of the
valves $\pm$ coherent;

seeds angular... ..

S. malacodendron

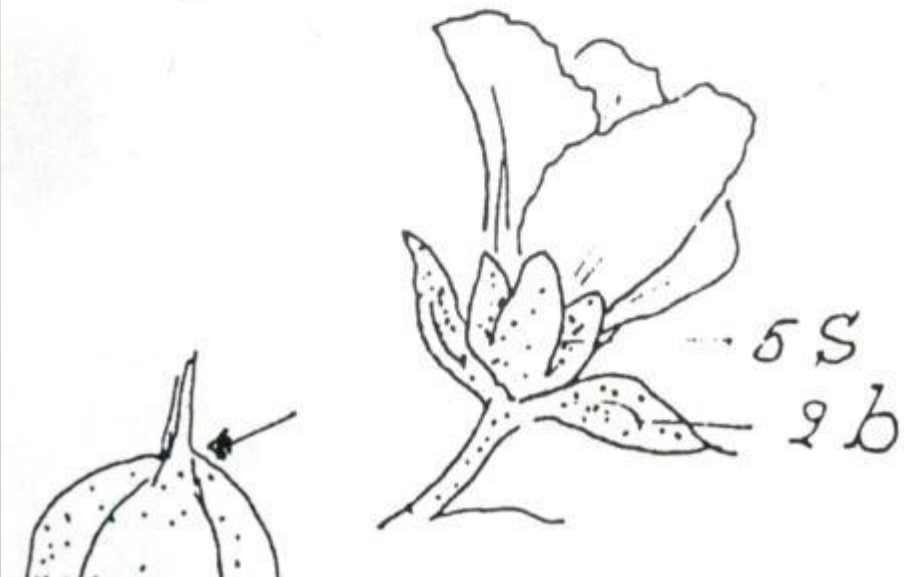


Stewartia malacodendron



C.1 Floral bracts
conspicuously shorter than
the calyx; small trees with
smooth, mottled bark;
young branches usually
compressed and zigzagged,
rarely terete
... .. 8. *S. pseudocamellia*.

C.2 Floral bracts about
equaling or longer than the
calyx; small or large trees
or shrubs with smooth or
fissured bark; young
branches usually terete,
not zigzagged.....D.



Stewartia pseudocamellia



Floral bracts (2, reniforme) conspicuously shorter than calix (5 sepals)

Stewartia pseudocamellia



5 rounded sepals, much larger than bracts



***Stewartia pseudocamellia* (Chiri San, Korea) -**



young branches usually compressed and zigzagged, rarely terete

Stewartia pseudocamellia



small trees with smooth, mottled bark

Stewartia pseudocamellia 'Ballet' VS. Stewartia 'Milk & Honey' -

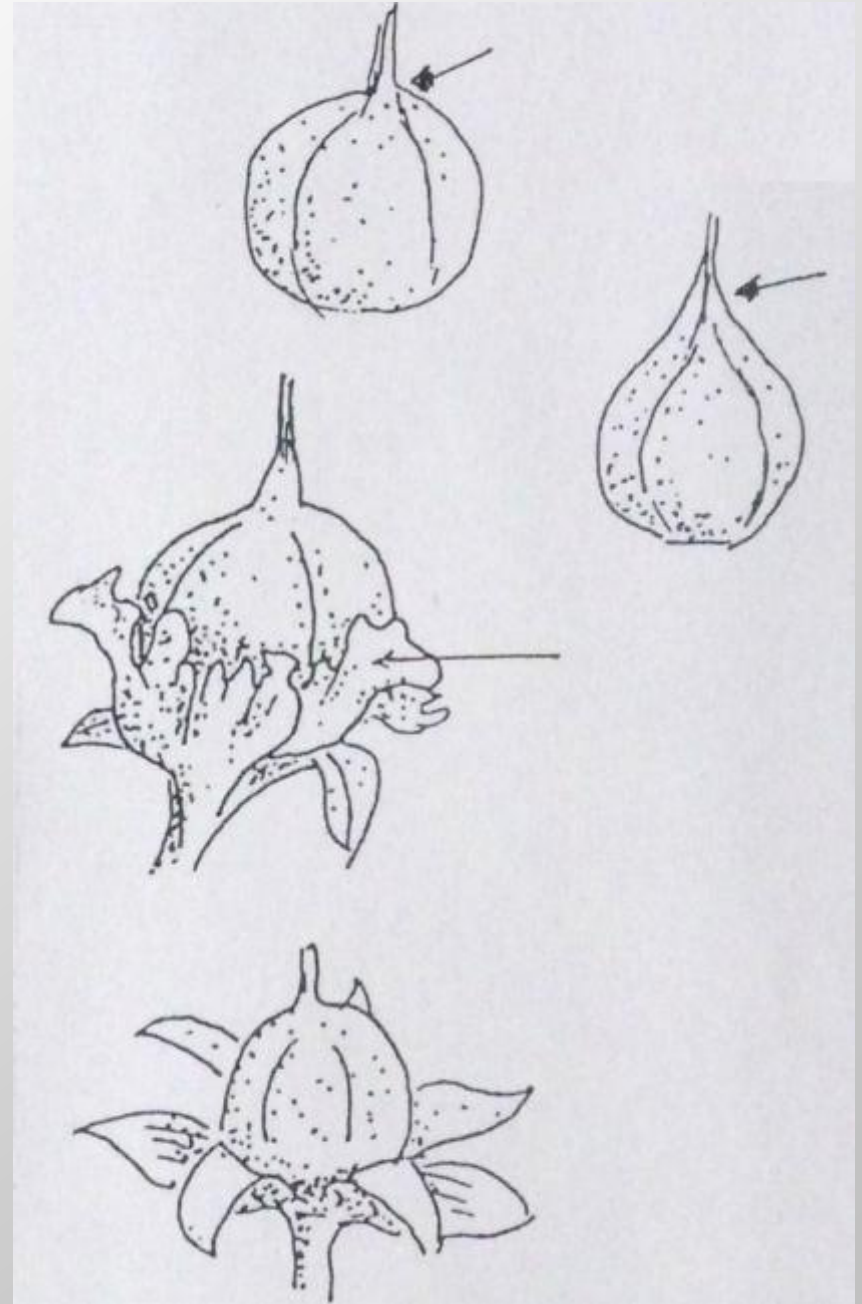


And one of the best flowers in the genus, mid June

D.1 Ovaries and/or capsules subglobose, completely glabrous or pubescent only at the very baseE.

E.1 Ovaries and/or capsules pubescent only at the very base; sepals twisted; 4 ovules or seeds per locule; bark on older branches finely fissured. (dull).....4. ***S. rostrata***.

E.2 Ovaries and/or capsules completely glabrous; sepals flat; 2 ovules or seeds per locule; bark on older branches smooth and mottled (pale orange); 3. ***S. serrata***.



Stewartia rostrata



Flower bud in early June : 2 large bracts, 5 twisted sepals

Stewartia rostrata



Subglobose fruit (ovary) glabrous,
with long rostrate beak (dried style) late June

Stewartia rostrata



bark on older branches finely fissured, (dull)

Stewartia rostrata



Flowers smallish, often pink on outer petal



Stewartia rostrata



Ovaries and/or capsules pubescent only at the very base;
sepals twisted;

Stewartia serrata



Ovaries and/or capsules completely glabrous;
sepals flat;

Stewartia serrata



UBC BG, Vancouver



Hakone Arboretum, Japan

Bark on older branches smooth and mottled (pale orange);

Stewartia serrata



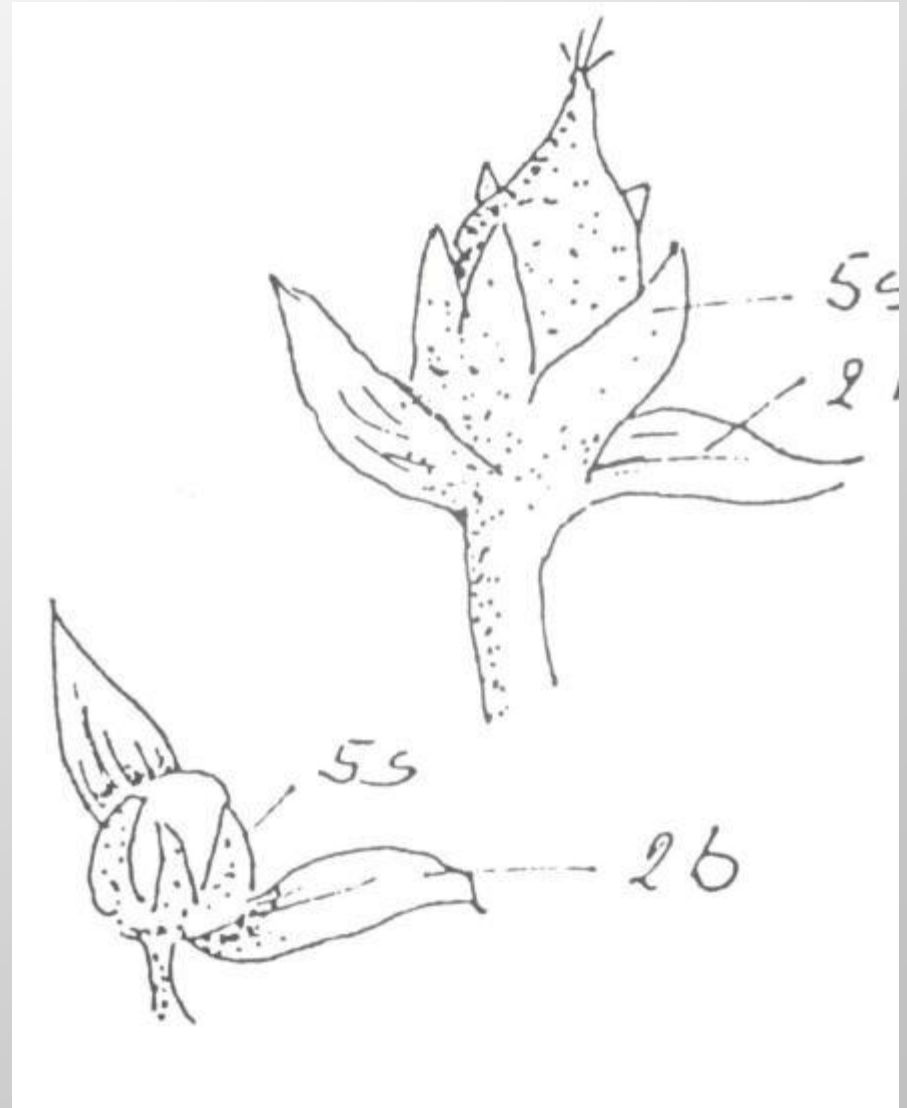
Modest hanging flower, red sepals serrate, early

Stewartia sinensis

D.2 Ovaries and/or capsule
conical, pilose or appressed
pubescent all the surface
.....G

G.1 Floral bracts ovate,
subequal to the sepals; styles
6-8mm. long; seeds 7-9 mm
long.... ... 5. *S. sinensis*.

G.2 Floral bracts oblong,
conspicuously longer than
the small sepals; styles 3-4
mm long; seeds 5-6 mm.
Long ... 6. *S. monadelpha*.



Stewartia sinensis



Floral bracts ovate, subequal to the sepals

Stewartia sinensis



Ovaries and/or capsules conical,
pilose or appressed-pubescent over the entire surface

Stewartia sinensis



Modest flowers

Stewartia sinensis



Variable bark, mottled to smooth thin, shiny copper coloured bark

Stewartia sinensis



Stewartia sinensis - Lamellen, Cornwall - 2008.0327

Stewartia monadelphpha



Floral bracts oblong, conspicuously longer than the small sepals

Stewartia monadelpha



Stewartia monadelpha - 92290-spi- O - 2006.1005

Stewartia monadelphpha



Modest flower,

Stewartia monadelphica



Barnes Arb., Philadelphia
- 1991.04



Chiverton, Cornwall -
2008.0324



Gonge Shrine, Hakone -
133cm girth - 2008.1011

Irregular peeling pale copper, shining, sometimes fluted, large shrub to small trees

More and more hybrids, as species grown close together will cross readily
Stewartia x henryi (pseudocamellia x monadelphica) is frequent and a good
plant

