Pittosporum Banks ex Gaertn. **(Pittosporaceae)**

VEGETATIVE KEY TO SPECIES IN CULTIVATION

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Vegetative identification key.

Introduction:

This key is based on vegetative characteristics, and therefore also of use when flowers and fruits are absent.

- Use a 10× hand lens to check pubescence and leaf margin incisions.
- Look at the entire plant
- Beware of hybridisation, especially with plants raised from seed other than wild origin.

Abbreviations used in this key:
- **L/W** = length/width
- **LS** = lower surface
- **US** = upper surface

Taxa treated in this key: → page 5.
Taxa referred to synonymy in this key: → page 5.
Remarks: → page 5.

References:

- JDL herbarium and illustrations
- living specimens, in various arboreta, botanic gardens and collections
- literature:

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Breitwieser I., Brownsey P.J.; Heenan P.B., Nelson W.A., Wilton A.D. eds. - (2010-) - ***Pittosporum*** in Flora of New Zealand Online, accessed at www.nzflora.info
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KEY to GROUPS

01 a Lamina margin dentate to lobulate at least in part of the foliage. ..... **GROUP A** → p2

b Lamina margin entire and predominantly flat to undulate. **02**

02 a Mature lamina LS pubescent at least along midvein (10× LENS). ..... **GROUP B** → p2

b Mature lamina LS glabrous. **03**

03 a Lamina apex predominantly obtuse or obtuse to acute. ..... **GROUP C** → p3

b Lamina apex predominantly acute to acuminate. ..... **GROUP D** → p3

GROUP A
Lamina margin dentate to lobulate at least in part of the foliage.

01 a Lamina margin predominantly clearly dentate. **02**

b Lamina margin dentate to (bi-)pinnatifid or (sub-)lobed at least in part of the foliage. **04**

02 a Lamina largest width clearly <15 mm. ..... ***P. patulum***

b Lamina largest width predominantly >20 mm. **03**

03 a Lamina elliptic to oblong-elliptic, margin with teeth acute. ..... ***P. dallii***

b Lamina elliptic to rhombic, margin with teeth obtuse. ..... ***P. rhombifolium***

04 a Largest leaves with lamina LS secondary veins 10-15/side. ..... ***P. patulum***

b Largest leaves with lamina LS secondary veins 0-8/side. **05**

05 a Small tree, lamina LS secondary veins 2-8/side (10× LENS). ..... ***P. turneri***

b Small dense shrub ≤1m, lamina LS secondary veins 0-2/side. **06**

06 a Shoot pubescent (10× LENS), bruised foliage resinous aromatic. ..... ***P. anomalum***

b Shoot (soon) glabrous, bruised foliage not aromatic. ..... ***P. divaricatum***

GROUP B
Lamina LS pubescent at least along midvein (10× LENS).

01 a Mature lamina LS scattered pubescent or with hairs near midvein only (10× LENS). **02**

b Mature lamina LS densely pubescent. **03**

02 a Lamina length 7 cm, petiole length <8 mm. ..... ***P. fairchildii***

b Lamina length 7-15 cm, petiole length 10-20 mm. ..... ***P. procerum***

03 a Lamina largest width in or below the middle. ..... ***P. bicolor***

b Lamina largest width in or above the middle. **04**

04 a Lamina LS secondary veins obscured. ..... ***P. crassifolium***

b Lamina LS secondary veins evident. ..... ***P. ralphii***

GROUP C

Lamina apex predominantly obtuse or obtuse to acute.

01 a Lamina largest width predominantly in the middle. **02**

b Lamina largest width clearly above the middle, or at least so in part of the foliage. **03**

02 a Lamina narrowly lanceolate, L/W ratio >5/1. ..... ***P. angustifolium***

b Lamina predominantly ovate to elliptic, L/W ratio always <4/1. ..... ***P. buchananii***

03 a Lamina apex predominantly obtuse to acute. **04**

b Lamina apex predominantly obtuse. **05**

04 a Petiole 1-2 cm. Lamina secondary vein/midvein angle 60-80°. ..... ***P. fasciculatum***

b Petiole 5-8 mm. Lamina secondary vein/midvein angle ≤45°. ..... ***P. truncatum***

05 a Lamina midvein length <15 mm. ..... ***P. obcordatum***

b Lamina midvein length 3-10 cm. **06**

06 a Lamina US secondary veins ≤8/side (disregard intercalary veins). ..... ***P. viridiflorum***

b Lamina US secondary veins ≥8/side. **07**

07 a Petiole rather thick, ≤1cm. ..... ***P. kirkii***

b Petiole rather slender, 1-2 cm. **08**

08 a Dense shrub, lamina US scattered pubescent (10× LENS). ..... ***P. tobira***

b Small tree, lamina US glabrous. ..... ***P. coriaceum***

GROUP D

Lamina apex predominantly acute to acuminate.

01 a Lamina narrowly elliptic to lanceolate with L/W ratio >5/1 at least in part of the foliage. **02**

b Lamina predominantly obovate to elliptic with L/W ratio always <5/1. ..... **06**

02 a Lamina variable with L/W ratio <5/1 at least in part of the foliage. **03**

b Lamina L/W ratio always >5/1. ..... **04**

03 a Lamina margin finely undulate with >10 closely spaced undulations/side. ..... ***P. senaica***

b Lamina margin flat to undulate with <7 distantly spaced undulations/side. ... ***P. glabratum***

04 a Lamina midvein length ≤3 cm. ..... ***P. pimeleoides***

b Lamina midvein length 5-12(-more) cm. **05**

05 a Leaves scattered, lamina apex with hook-like acumen (10× LENS). ..... ***P. angustifolium***

b Leaves clustered at shoot end, lamina apex acuminate. .... ***P. illicioides*** var. ***angustifolium***

06 a Lamina largest width always above the middle. **07**

b Lamina variable with largest width in the middle, or at least so in part of the foliage. **09**

07 a Petiole 0-4 mm. ..... ***P. heterophyllum***

b Petiole 8-30 mmm. **08**

08 a Petiole <15 mm. ..... ***P. illicioides***

b Petiole 10-30 mm. ..... ***P. brevicalyx***

09 a Lamina LS secondary veins closely spaced, 10-20/side (disregard intercalary veins). ... **10**

b Lamina LS secondary veins rather distantly spaced, 5-10(-12)/side. **12**

10 a Shrub, petiole ≤15 mm. ..... ***P. revolutum***

b (small) Tree, petiole 15-30 mm. **11**

11 a Lamina margin with many small undulations. ..... ***P. undulatum***

b Lamina margin with few large undulations. ..... ***P. eugenioides***

12 a Lamina length predominantly ≤10 cm. **13**

b Lamina length 10-20 cm. **14**

13 a Lamina US pale green, margin predominantly undulate. ..... ***P. tenuifolium***

b Lamina US dark green, margin predominantly flat. ..... ***P. colensoi***

14 a Present year shoot rather slender, Ø <4 mm. ..... ***P. crispulum***

b Present year shoot rather thick, Ø >4 mm. **15**

15 a Lamina apex with midvein needle-like excurrent (10×LENS). ..... ***P. daphniphylloides***

b Lamina apex with midvein not needle-like excurrent. ..... ***P. napaulense***

Taxa treated in this identification key.

P. angustifolium
P. anomalum
P. bicolor
P. brevicalyx
P. buchananii
P. colensoi
P. coriaceum
P. crassifolium
P. crispulum
P. dallii
P. daphniphylloides
P. divaricatum
P. eugenioides
P. fairchildii
P. fasciculatum
P. glabratum
P. heterophyllum
P. illicioides
- var. ***angustifolia***
P. kirkii
P. napaulense
P. obcordatum
P. patulum
P. pimeleoides
P. procerum
P. ralphii
P. revolutum
P. rhombifolium
P. senacia
P. tenuifolium
P. tobira
P. truncatum
P. turneri
P. undulatum
P. viridiflorum

Taxa referred to synonymy in this identification key.

P. floribundum* = *P. napaulense
P. omeiense Hort **= *P. crispulum***
P. phillyreoides* = *P. angustifolium
***P. ripicolum* = P. viridiflorum**
P. sahnianum* = *P. illicioides

Remarks.

Plants under the name ***P. heterophyllum*** are often ***P. truncatum***.
Plants under the name ***P. omeiense*** are often ***P. crispulum***.