

BUXACEAE, the Boxwood Family

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BUXACEAE, the Boxwood Family

Shrubs or small trees, rarely subshrubs or perennial herbs, evergreen, monoecious or rarely dioecious; lvs simple, alternate or opposite, exstipulate, entire or dentate, venation pinnate and/or triplinerved; infls axillary or terminal, racemose or densely spicate, bracteate; fls small, regular, unisexual; staminate fls with tep 4–6 or rarely absent, stamens 2, 4, 6–8, or numerous, centr pistillode present or lacking; pistillate fls with tep 5, 6, or several, carpels 2 or 3, ovary superior, 2- or 3-locular, styles 2 or 3, free, large, persistent, stigma recurved, ovules 2 (rarely more) per locule, anatropous, bitegmic, crassinucellar; fr a loculicidal dry capsule or fleshy berry; seeds black, shining, endosperm fleshy, embryo erect. 5/135, N. Am., Afr., Centr Am., Asia, Eur.

Morphologic synapomorphies: monoecious, infls bracteate, fls 2- or 3-carpellate, styles free and large, stigmas recurved.

- 1 Erect shrubs or small trees; lvs opposite, entire, pinnately veined; pistillate fl solitary, apical on infl 1. *Buxus*
- 1 Prostrate shrubs or herbs; lvs alternate, dentate, usu triplinerved; pistillate fls multiple, in proximal part of infl 2. *Pachysandra*

1. BUXUS L. (historical L name, related to G “pyxos,” name of *Buxus sempervirens*) Boxwood. Shrubs or small trees, evergreen, monoecious; young branches tetragonous; lvs opposite, shortly petiolate, leathery, often shining, entire, venation pinnate; infls axillary or terminal, racemose, spicate, or capitate cluster, bracteate; pistillate fl solitary, apical, staminate fls several, in proximal part of infl; fls small, unisexual; staminate fls: tep 4; stamens 4; centr pistillode present; pistillate fls: tep 5 or 6; carpels 3; ovary 3-locular; styles 3, free; stigma often decurrent; interstylar nectaries present; fr a dry capsule, loculicidal, splitting into 3 valves. 110, Afr., Centr Am. Asia, Eur.

1. Buxus sempervirens L. (evergreen) Common B. Evergreen shrubs or trees, ≤8 m, young twigs 4-angled, slightly winged, olive-green, foliage dense; lvs 15–30 × 7–15 mm, ovate to ovate-oblong or oblong-elliptic, obtuse or notched on apex, dark green above, paler beneath, glossy, petiole short, margins inrolled; fls yellow, fragrant. Cult outdoors throughout most of our range and persisting a long time without support; native to s. Eur. Spring. Freq.

2. PACHYSANDRA Michx. (thick stamens) Pachysandra. Subshrubs, creeping or decumbent, or perennial herbs; lvs alternate, petiolate, leathery or papery, dentate in apical half, rarely entire, triplinerved. Infls terminal or axillary spikes, bracteate,

androgynous; staminate fls inserted in middle to apical part, pistillate fls in proximal part; fls small, white or rose; staminate fls: tep 4, divided into outer and inner series; stamens 4, opposite tep; filaments exerted, slightly compressed and broad; with sterile pistil; pistillate fls: tep 4–6; ovary with 2 or 3 locules; styles 2 or 3, long; stigma decurrent to middle or middle-lower part of style; bracts and tep ciliate; interstylar nectaries lacking. Fr a drupe. 3, 1 in N. Am., 2 in e. Asia.

- 1 Infl at base of stems1. *P. procumbens*
 1 Infl terminal2. *P. terminalis*

1. *Pachysandra procumbens* Michx. (creeping) Allegheny spurge. Rhizomatous, semi-evergreen, perennial herb; stems 15–40 cm; lvs 50–100 mm, mottled brown-green, ovate to circular, toothed at apex, each gradually narrowed below middle; infl arising from base of stems, spikes 60–120 mm, with 20–40 staminate fls and 1–7 tricarpellate, pistillate fls; fr spherical, 15 mm; rich woods; native KY, s. to FL and LA, escaped from cult in CT, NY, PA, IN. Mar–May. Infreq; secure.

2. *Pachysandra terminalis* Siebold & Zucc. (terminal, ref to infls) Japanese P. Evergreen subshrubs; stem slightly thick, puberulent, lower part rhizomatous, prostrate, curved or obliquely ascending, upper part erect, ca 30 cm tall, leafy; lvs at intervals of 2–4 cm on stem or 4–6 lvs close to each other; petiole 1–3 cm; 25–60 mm, leathery, green, base attenuate into petiole, dentate toward apex; infls terminal, spikes 20–40 mm, with 15+ staminate fls and 1–2 bicarpellate pistillate fls; fr ovoid, 6–7 mm. Cult outdoors throughout our range, and persisting a long time without support, sometimes escaping; native to e. Asia. Mar–May. Freq.

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