

Vascular Plants of Williamson County

Nandina domestica – HEAVENLY BAMBOO [Berberidaceae]

Nandina domestica Thunb., HEAVENLY BAMBOO. Shrub, evergreen, several-stemmed at base, principal axes erect to suberect, in range < 110 cm tall; shoots with large, complex, 2-dimensional cauline leaves, each leaf firmly attached to stem and persistent for several years. **Stems:** young stems concealed by overlapping, sheathing petioles; older woody stems easily broken, with reddish periderm having warts and with longitudinal lenticels; wood yellow. **Leaves:** helically alternate, symmetrically odd-pinnately-(2-)3-compound with paired and opposite primary and secondary lateral leaflets, pairs of lateral primary leaflets to 5, pairs of lateral secondary leaflets to 6, overall blade \pm diamond-shaped and 75–500 \times 95–680 mm, petiolate, without stipules; petiole cylindrical above an enlarged, flaring, clasping basal portion, 10–130 mm long, green; rachis cylindrical (slender axes somewhat angled), 62–440 mm long, with jointed construction at junctions of axes (swollen at the base of each rachilla segment), the lowest axis segment 9–135 mm long (between pairs 1 and 2 of lateral primary leaflets), minutely glandular-puberulent approaching joints in axes; primary leaflets diverging at 45–60°, of large leaves the lowest 1–2 pairs having 1–2 secondary leaflets having 3-foliolate tertiary leaflets, middle secondary leaflets pinnately compound having 5 leaflets and 3-foliolate, the uppermost primary leaflets and secondary leaflets mostly 1-foliolate, on primary leaflets the second rachilla segment the longest (to 86 mm long); secondary leaflets to 110 mm long; petiolules of ultimate blades short–5 mm long, 3-foliolate leaflets subsessile; ultimate blades of large leaflets to 80, lanceolate or ovate to elliptic, (25–)36–70 \times (14–)17–22 mm, some leaflets 2–3-lobed, of smaller leaflets ovate to elliptic or roundish, 6–33 \times 2.5–15 mm, terminal > lateral, symmetric or slightly asymmetric (lateral blades), sometimes tinged red, tapered at base, entire, narrowly acute to acuminate at tip, pinnately veined with midrib raised on lower surface, lower surface minutely glandular-puberulent.

Inflorescence: panicle of racemes, terminal on each shoot, open, 200–300+ mm long, having a principal axis and a series of lateral panicles of racemes, with 3–4 orders of branching, each branch panicle ascending with lateral racemes 50+-flowered, the lowest branch often at base of panicle, each raceme with to 4 helically alternate flowers, the lowest flower or flowers of a raceme often early-abscising, bracteate, glabrous; bract subtending raceme appressed, awl-shaped, 1–1.5 mm long, green with membranous margins; pedicel < 1–6 mm long, with “bractlet” subtending flower, deltate, to 1 mm, appressed bracteoles subtending flower undetermined, of some authors 6 or 9 in whorls of 3, indistinct from perianth and produced on lower portion of receptacle (torus), bracteoles 3 (as treated here), tightly appressed to perianth, \pm triangular to inverted heart-shaped, 1.3 \times 1 mm, raised green back with thin, narrow colorless margins, papillate-fringed. **Flower:** bisexual, radial, 5–11 mm across (narrow when petals reflexed); fragrant; receptacle barrel-shaped (torus), ca. 1.2 \times 1.2 mm, initially bearing perianth, stamens, and pistil, during pollination torus with 6 vertical files of perianth scars; **perianth** segments 24 in 8 whorls to 33 in 11 whorls, formed on whitish torus, strongly the lowest inverted heart-shaped, ca. 1.5 mm long, green with whitish margin, integrand, each whorl increasing in size and decreasing green = 3 whorls, “sepals” = at least 2 whorls, cupped-ovate, 3.5–4 mm long, cream-colored and white (green absent), abscising before anthesis, “petals” = 3

whorls, cupped-ovate, 4.5–5 mm long, white, initially spreading soon reflexed and early-abscising, not producing nectar; **stamens** 6(–7), free, sessile; filaments absent; anthers basifixed (sessile), dithecal, \pm ascending, $4 \times 1\text{--}1.2$ mm, light yellow with green connective and green at point of attachment; **pistil** 1, on top of torus, 4 mm long; ovary superior, club-shaped, ca. 2.5×1.5 mm, glossy white, glabrous, 1-chambered with (1–)2(–3) ovules; style funnel-shaped, white, with minutely toothed green stigmatic lobes at top. **Fruit:** berry, 1–2-seeded, \pm spheric, $9.5\text{--}11 \times 9\text{--}10$ mm, scarlet, smooth, with persistent style on top ca. 1×0.4 mm, blackish, sometimes with torus at base; pulp white and mealy (not juicy). **Seed:** mushroom caplike, $2.5\text{--}3.5 \times 5\text{--}7$ mm, light tan with brown dots or blotches.

A. C. Gibson