

Boykinia Nutt.

Boykinia rotundifolia A. Gray, ROUND-LEAVED BOYKINIA. Perennial herb, rhizomatous, fibrous-rooted, rosetted, 1-stemmed at base, erect to ascending, 30–120 cm tall; shoots with numerous basal laves and cauline leaves, conspicuously glandular-hairy; rhizomes scaly, commonly with adventitious roots perforating the flared petiole bases. **Stems:** cylindric or somewhat angular, to 8 mm diameter, green becoming rose-red at base, viscid-hirsute with glandular hairs. **Leaves:** helically alternate (basally in tight gyres), simple and palmately (crenately) lobed, long-petiolate, with stipules; stipules 2 but obscure; petiole of basal leaves channeled and flared at base, 50–270 mm long, of cauline leaves reduced upward, glandular-hairy and villous with coarse brownish or pinkish hairs 1.5–4(–10) mm long; blade round to broadly ovate or kidney-shaped, in range 35–130(–160) × 30–140(–180) mm, with cauline leaves reduced upwards and grading into bracts, the crenate lobes paired with divisions between lobes typically alternating shallow-deep with deeper notches 3–4 mm, cordate at base, dentate-serrate and ciliate on margins, palmately veined with principal veins sunken on upper surface and raised on lower surface, upper surface sparsely long-hairy to nearly glabrate, lower surface long-hairy and glandular-hairy especially along veins. **Inflorescence:** panicle of 1-sided cymes, terminal and often with axillary cymes on long peduncles, open, cyme branchlet < 9-flowered, with flowers developing tip to base (basipetal) and pointing upward at anthesis but soon deflexed, bracteate, glandular-hairy; bract subtending peduncle = cauline leaf; peduncle and flower axes < 1.5 mm diameter, conspicuously glandular-hairy; bractlet subtending pedicel typically absent; pedicel < 2 mm long. **Flower:** bisexual, radial, 3–3.5 mm across, bell-shaped becoming urn-shaped in fruit, with glandular hairs; hypanthium fused to calyx tube and ovary, cup-shaped fused 1.5–2 mm to ovary, green; **calyx** 5-lobed, 3.5–6 mm long, green, glandular with red-headed hairs; tube 10-veined; lobes triangular, 1.5–2 mm long, directed inward, weakly pointed at tip; **petals** 5, clawed and spatulate, 1.9–2.5(–3) × 0.9–1.4 mm (= 1.5× sepal length), white; **stamens** 5, free, erect, arising from upper hypanthium opposite sepals, 0.7–1 mm long, stout-tapered, whitish; anthers basifixed, dithecal, heart-shaped, 0.5–0.7 mm long, light yellow, longitudinally dehiscent with whitish point at tip prior to opening; pollen light yellow; **nectary** at base of free hypanthium and on top of ovary; **pistil** 1; ovary half-inferior, 2.5–3 mm long, fused to hypanthium for 1/3–2/3 of ovary length, 2–3-chambered, each chamber with many ovules, the tops of chambers tapering into styles; styles 2–3, narrowly conic, becoming grooved in inner face, whitish, each stigmatic at tip; stigmas yellowish greenish aging red-purple, with minute papillate hairs. **Fruit:** capsule, dehiscing longitudinally on free inner face to top of style, many-seeded, 4.5–6 mm long, with persistent petals. **Seed:** ± ellipsoid, 0.4–0.5 mm long, black, weakly and irregularly faceted with convex, flat, and concave faces, with at least 1 principal angle, uniformly and densely minutely warty. Late May–early July.

Native. A rosetted perennial herb of riparian woodland, found only in moist soil adjacent to a permanent creek, such as below a waterfall, where you would also find the ferns *Adiantum capillus-veneris* and *Woodwardia fimbriata*. Petals of this species barely extend beyond the calyx, and the stamens and stigma are included, suggesting that this species is self-pollinated, and it is highly successfully in producing its many-seeded fruits.

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