

Vascular Plants of Williamson County

Buchnera americana – FLORIDA BLUEHEARTS, AMERICAN BLUEHEARTS
[Orobanchaceae/Scrophulariaceae]

Buchnera americana L. (incl. *B. floridana*), FLORIDA BLUEHEARTS, AMERICAN BLUEHEARTS. Perennial herb, presumably hemiparasitic via roots on other plant rhizomes, rhizomatous, typically 1-stemmed at base, erect, 30(–80) cm tall; shoot with only cauline leaves, foliage conspicuously scabrous, short-hairy with short hirsute-hispid upward-pointing on stems and leaves; rhizome shallow, horizontal, glossy red-purple with purplish tissue. **Stem:** weakly 4-sided to cylindric in lower portion, rounded face alternating with flattish face having a shallow furrow, to 3 mm diameter, green or with fine reddish stripe in each furrow, internodes increasing upward to 85 mm long, lacking ledges across nodes, short hirsute-hispid hairs appressed, with inconspicuous short-stalked glandular hairs approaching inflorescence. **Leaves:** opposite to subopposite decussate, simple and sessile, without stipules; blade elliptic or obovate to oblanceolate or oblong-oblanceolate, (< 20–)50–60 × 6–20 mm, unequally 3-veined at base, tapered at base, in range entire (several low teeth on margins), rounded to obtuse at tip, pinnately veined with principal veins somewhat sunken on upper surface and raised on lower surface, surfaces uniformly short-hairy with appressed, upward-pointing nonglandular hairs. **Inflorescence:** spike, terminal, many-flowered, flowers ascending, alternate to opposite, bracteate, short-hairy and inconspicuous glandular hairs; peduncle stemlike; rachis 4-sided (squamish in ×-section), green tinged with purple; bractlet subtending flower appressed to flower, ovate, 3.5–4 × 2 mm, green or with purple acute tip, partially concealing a lateral pair of green, lanceolate bracteoles ca. 2.5 × 0.5 mm, short hirsute-hispid. **Flower:** bisexual, ± radial, ca. 8 mm across (corolla limb); **calyx** 5-lobed, in range 5.3–6.5 mm long; tube ribbed, lower portion mostly green and upper portion mostly purple, short hirsute-hispid with upward-pointing hairs and having inconspicuous, short-stalked glandular hairs, inner surface lacking hairs; lobes erect, triangular to deltate, 0.8–1 mm long but 1 lobe often smaller, purple; **corolla** 5-lobed, 14–15 mm long base to lobe tip, tube + throat 7–7.5 mm long, exerted from calyx at midthroat; tube cylindric stretched to barrel-shaped around ovary, 3 × 1.3 mm, 10-veined, at base flat, purple veins alternating with colorless tissue, most of tube masked with green; throat strongly 5-ribbed, ca. 1 mm diameter, outer surface purple and spreading short-hirsute, inner surface purple-red, having abundant curly short hairs; lobes widely spreading, ± obovate, in range 5–5.5 × 2–2.5 mm, light purple, rounded to shallowly notched at tip, upper surface with scattered short-pilose and pilose to midlobe, the hairs resembling a string of beads; **stamens** 4, attached at top of corolla tube; filaments unequal, 0.4–1.6 mm long, green to purple; anthers dorsifixed, dithecal, included, ca. 1.5 mm long including projection at top, tannish aging purple, longitudinally dehiscent; pollen colorless; **nectary disc** surrounding base of pistil, purple; **pistil** 1, ca. 4.5 mm long, included; ovary superior, sausage-shaped, ca. 3 × 1.5 mm, light yellow-green, glabrous, 2-chambered, each chamber with many ovules attached to center (axile placentation); style 2-branched, lower portion green and above midpoint stigmatic branches tinged purplish. **Fruit:** (not observed) capsule, many-seeded, dehiscent by 2 valves, before dehiscent ovoid-oblong, ca. 7 mm long, light brown, glabrous. **Seed:** (not observed) angular, 0.6–0.8 mm long, brown to dark brown, honeycombed.

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