

Rumex stenophyllus Ledeb., NARROWLEAF DOCK. Perennial herb, taprooted, rosetted with a cluster of ascending basal leaves, with lateral branch commonly at each node, erect, to 210 cm tall; shoots glabrous but with minute, transparent papillae along veins of stems and leaves. **Stems:** ± circular to pentagonal in ×-section, to 25 mm diameter at base, on young stem with ridge descending from each leaf, tough, straight or weakly flexuous with a slight bend at node, green becoming purplish red on exposed surfaces, slightly swollen at nodes, internodes 150–300 mm long; solid. **Leaves:** helically alternate, simple, mostly long-petiolate, with stipules; stipules (2) fused to form a sheath (ocrea) above node and fused to upper side of petiole, membranous, to 150 mm long (basal leaves) reduced to 20 mm long (upper cauline leaves), with ca. 10 purplish red parallel veins, initially light green or transparent-membranous soon drying pale brown and smooth between reddish veins, fragile and splitting with some fractured parts adhering to stem or petiole and often partially persistent on base of internode; petiole hemi-cylindric, to 300 mm long (basal leaves) and 15–120 mm long (cauline leaves), scaling with blade length, flexible, ridged, flared at base and 1/2-encircling stem; blade lanceolate to oblanceolate, to ca. 800 × 80 mm (basal leaves) reduced to < 260 × 70 mm (upper cauline leaves), tapered at base, entire and minutely wavy on margins, acute at tip, pinnately veined with veins raised on both surfaces, midrib complex with 3 conspicuous parallel ridges on upper side and 5–7 ridges on lower side (basal leaves) or less so on smaller cauline leaves, ± crystalline from transparent papillae along veins. **Inflorescence:** panicle, terminal on the main and axillary shoots, principal axis somewhat zigzagged and forming ascending branchlet at each node, all axes having whorl-like flower clusters (cymes) of 16–60 flowers at each node separated by conspicuous internodes, ultimate branchlet 90–270 mm long, with 15–25 nodes, flowers nodding, bracteate with ocrea, glabrous; bract subtending principal branch leaflike with petiole, also irregularly subtending branchlet and flower cluster, reduced upward to ca. 50 × 5 mm; ocrea subtending flower cluster membranous, 2–3 mm long; pedicel curved, initially short increasing to 8–12 mm long in fruit, in fruit with a swelling 3–5 mm from base. **Flower:** bisexual, radial, at anthesis ca. 1.5 mm wide; protandrous; **perianth** 6-lobed, lobes (sepals and petals) in 2 distinct whorls; tube inversely conic and 3-angled, ca. 0.5 mm long, dark green; lobes dimorphic, triangular, 1–1.2 mm long, outer whorl keeled and elliptic to ovate, 1.3–1.7 × 0.7 mm, inner whorl with a callus (tubercle) on each lobe, yellowish green with whitish membranous margins, cupped, inner lobes entire becoming enlarged and toothed after pollination, at anthesis the midrib slightly raised and green but becoming a tubercle after pollination; **stamens** 6, fused to top of perianth tube; filaments threadlike, 0.4–0.5 mm long, light yellow; anthers basifixed, dithecal, oblong, 0.6–0.8 mm long, light yellow, cleft at tip and rounded at ends of sacs, longitudinally dehiscent; pollen pale to light yellow; **pistil** 1; ovary superior, obovoid and strongly 3-angled, ca. 0.7 × 0.4 mm, whitish, 1-chambered with 1 ovule; styles 3, ca. 0.5 mm long, white, terminated in 6–12 stigmatic branches, the branches to 0.2 mm long. **Fruit:** achene enclosed in persistent perianth, pendent; outer 3 perianth lobes narrowly acuminate to lanceolate, 1.3–1.7 mm long, inner 3 perianth lobes pentagonal to broadly ovate with tubercle on each, 3.3–5 × 3.2–5 mm, truncate to slightly cordate at base, dentate with 2–6 teeth on margins mostly below midpoint, the teeth to 1 mm long, acute to acuminate at tip, with conspicuous netlike venation, with a conspicuous tubercle, the tubercles subequal or unequal, ovoid, 1.5–2 × 0.6–1.2 mm; achene 3-angled fusiform,

2.6–2.7 × 1.3–1.4 mm long, narrowly winged on angles, glabrous, glossy and light yellow-ochre to grayish brown, paler on edges, slightly convex on faces between winged angles, glabrous. Late summer.

Naturalized. Perennial herb known in range along Calleguas Creek mostly in sand with other robust herbs, e.g., *Melilotus albus*, *Xanthium stramonium*, *Schoenoplectus americanus*, and *Typha* spp. *Rumex stenophyllus* resembles *R. crispus* but in fruit has distinct teeth on the inner perianth lobes and a narrower achene that almost seems winged because the edges are so narrow.

B. A. Prigge & A. C. Gibson