

*Calodendrum capense* (L. f.) Thunb., CAPE CHESTNUT. Tree, briefly deciduous, branching mostly opposite, in range 3–8 m tall; shoots having leaves dotted with secretory glands, when crushed producing a mild, aromatic citrus scent (monoterpenes). **Stems:** initially somewhat 4-sided, on leafy shoots most internodes < 15 mm long, with 2 opposite sides slightly grooved, densely short-pubescent with unbranched, branched, and stellate hairs, becoming glabrescent; initially with raised, opposite leaf scars; periderm with small, raised, dotlike lenticels; bark tight, dull reddish gray. **Leaves:** opposite decussate, simple, petiolate, without stipules; petiole  $\pm$  cylindrical somewhat flattened on upper side, 2.5–6 mm long, initially short-hairy like stem; blade elliptic to ovate or obovate, in range 38–170  $\times$  17–87 mm (sometimes wider in cultivated specimens), broadly tapered and often somewhat asymmetric at base, entire, acute to obtuse at tip, conspicuously pinnately veined with principal veins raised on lower surface, gland-dotted especially with a line of glands close to each margin, short-pubescent aging glabrescent, upper surface often glossy dark green. **Inflorescence:** dichasial cyme, terminal, appearing hemispheric, to 130 mm across, to 19-flowered and essentially lacking a peduncle, lateral branchlets opposite to subopposite decussate, at the lowest 1 or 2 nodes often 3-flowered and upper branchlets 1-flowered, puberulent, the hairs often branched at base; bractlets subtending pedicel 2, awl-shaped, 1.3–1.5 mm long, puberulent, abscising when flower buds tiny; pedicel spreading to erect, in range 10–16 mm long, at midpoint often with 2 diminutive bracteoles. **Flower:** bisexual, radial, ca. 70 mm across; **calyx** (4–)5-lobed, fused only at base, starlike and radiating or lobes slightly recurved, stiff and thick, lower surface densely puberulent; lobes ovate, ca. 3.5  $\times$  1.8–2.5 mm, light green on upper surface with a purple-red triangle to midpoint, sinuses and lower margins sometimes somewhat inrolled under, persistent; **petals** (4–)5, spreading, narrowly oblanceolate, in range 32–35  $\times$  5.5–6.5 mm, light purplish pink but strong reddish purple at base (upper surface), with scattered reddish purple spots (secretory cavities) below midpoint, upper surface with short hairs pointed toward base, lower surface with raised midvein and densely pubescent; **stamens** (4–)5 fertile stamens (opposite calyx lobes) alternating with (4–)5 staminodes (opposite petals) in 1 whorl, butted thereby trapping nectar; filaments of fertile stamens  $\pm$  ascending and confined by staminodes, cylindrical, to 35 mm long, light purple pink with reddish purple blisters to midpoint, inconspicuously puberulent at base on inner and outer sides; anthers dorsifixed, dithecal,  $\pm$  2.8 mm long, strong reddish purple tinged greenish or brownish, with an inconspicuous gland at tip, longitudinally dehiscent; pollen greenish; staminodes  $\pm$  erect, narrowly oblanceolate and clawlike below midpoint, linear but lanceolate-expanded above midpoint, 50–55  $\times$  1.7–4 mm, > petals, light purplish pink tinged greenish at base, the claw mostly compressed front-to-back and inconspicuously puberulent at base on inner side, petal-like above midpoint, tapered to contorted tip above petals, with scattered reddish purple blisters base-to-tip; **nectary** a thick cup interior to stamen bases, 3 mm across, ca. 0.6 mm long, producing copious nectar; **pistil** 1, long-stalked (gynophore); gynophore at anthesis 4.5–7 mm long, strong reddish purple and blistery; ovary superior, 5(–6)-lobed, ca. 1.5  $\times$  1.2 mm, green, densely covered with glandular hairs having colorless heads, low lobes with conic hair bases strong reddish purple, 5(–6)-chambered, each chamber with 2 ovules attached to center; style straight-cylindrical, to 11.5 mm long, strong reddish purple below midpoint becoming deep purplish pink at tip; stigmas 5(–6), appressed, triangular. **Fruit:** capsule, woody, septicidal, dehiscent by 5(–6) valves from

base upward, 5–10-seeded, lobed and subspheroid (before dehiscent), when releasing seeds 25–35 × 30–45 mm diameter (large fruit with 2 hard seeds per chamber), length < width, brown; valves 12–20 mm wide, conspicuously bumpy and warty covered with blunt-pointed conic to pyramidal projections to 3.5 mm long. **Seed:** subspheroid and stonelike to hemi-spheroid or 3-sided, 15–21 × 10–15 mm, ± glossy black, often with 1 or 2 somewhat flat to concave faces, not smooth but with scattered depressions or ripple marks; hilum long and broad mostly on a curved face. Early February–mid-June.

Waif. Tree from South Africa first cultivated in southern California and reproducing at one site in Malibu where formerly there was a residence. *Calodendrum capense* is a member of the citrus family, and has the characteristic secretory cavities in leaves producing aromatic compounds (monoterpenes). This species has bizarre, showy flowers, including having half of the stamens sterile (petal-like staminodes), and the showy lavender pink to light purple parts have scattered, blisterlike, purple-red glands, which are actually secretory cavities.

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