

Nymphaea L. WATERLILY

Nymphaea mexicana Zucc., YELLOW WATERLILY, BANANA WATERLILY. Aquatic perennial herb, clonal, colony-forming, rhizomatous, stolon-bearing, fibrous-rooted, rosetted, with floating blades; shoots with only basal leaves arising directly from submersed rhizome, glabrous; rhizomes rooted in muck, unbranched, erect, cylindrical; stolons spongy with long internal air canals, forming curved, overwintering adventitious roots at terminal nodes and later a new rhizome. **Leaves:** helically alternate, simple and near blade center (pseudopeltate), long-petiolate, without stipules; petiole cylindrical, 500–1500+ mm long (= distance of rhizome to water surface), 4–9.5 mm diameter (scaling with blade size), the narrowest at base, tough, flexible, internally with 2 large, central, longitudinal air canals and narrower ones around the periphery, with hard, star-shaped cells protruding on internal surface of canals; blade (floating) broadly ovate to roundish, 70–280 × 70–210 mm, flat or cupped upward, shiny green on upper surface but with yellowish, circular spot above petiole on young leaf, often rose-tinted on lower surface, deeply lobed at base with lobes slightly overlapping to slightly spreading, shallowly subentire to wavy horizontally or wavy vertically (if cupped) on red-edged margins, rounded at tip, radially veined typically with 11, 13, or 15 principal veins, if broadly ovate with pinnate laterals from midvein, veins conspicuous only on lower surface. **Inflorescence:** flowers solitary, axillary, on long stalks, without bracts, glabrous; peduncle (= pedicel) typically emergent, to 1500 mm long (= depth of water), internally with 5 large, central, longitudinal air canals and smaller canals around the periphery. **Flower:** bisexual, radial, 60–100 mm across, diurnal and closing before sunset; **sepals** 4, appearing whorled, elliptic-lanceolate, 60–85 × 20–27 mm, pale yellow and green-tinged and rose-tinged on lower surface, ± acute and cupped at tip; **petals** (12–)20–30, helically alternate, spreading to ascending, outer petals attached below ovary, inner petals fused to side of ovary, light yellow; outer 5 petals elliptic with acute tip, ± = sepals, gradually shorter inward, inner 10 petals oblanceolate, the shortest petal ca. 40 mm long with an obtuse tip; **stamens** 50–65, free, helically arranged, attached to upper lateral surface of ovary, bright yellow en masse, decreasing in length toward center, the longest 40 mm long and erect, the shortest 10 mm and incurved over stigmas becoming erect before senescence; outer filaments broad and flat, narrowly rhombic-elliptic and petal-like, < 8 mm wide, tapered to tip; inner filaments narrower than anther; anthers basifixed, dithecal, linear, 3.5–8 mm long, light yellow, longitudinally and inwardly dehiscent; pollen light yellow; **pistil** 1; ovary partially inferior, spheric to oblong, 5–9 mm diameter, 8–10-chambered, each chamber with 6–10 ovules; style absent; stigmatic disc = whorl of 8–10 fleshy appendages terminating stigmatic lobes, the appendages tongue-shaped, 4–5 mm long, upwardly incurved around rim, bright yellow; stigmatic zones radiating on stigmatic disc below appendages, papillate, light yellow, the disc center depressed with translucent or flesh-colored, ovoid projection 2 mm long. **Fruit:** berry, with many crescent-elliptic scars from abscised petals and stamens, irregularly dehiscent into lanceoloid segments, many-seeded, spongy, subspheroid, ca. 15 mm. **Seed:** arillate, with aril spheric, 5 mm, covered with hairlike papillae. Late May–late September.

Naturalized. An aquatic perennial herb (waterlily) first collected in bloom during 2004 from shallow water of Century Lake, a small, quiet pond (reservoir behind a dam) in

Malibu Creek State Park. *Nymphaea mexicana* clones and has large flowers that float on the surface from limp peduncles. The 1966 flora listed the waterlily *Nuphar polysepala* (cow-lily), based on a sterile specimen collected in mid-October, 1959 from the same district of SMM. Because both species of waterlilies have very similar floating leaves, we suspect that this could have been a misidentification; naturalists should continue to search during summer months for flowers of every local population of waterlily, because the smaller, bright yellow flowers of *Nuphar*, which are held erect from the water surface and less than 100 millimeters in diameter, are easy to identify.

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