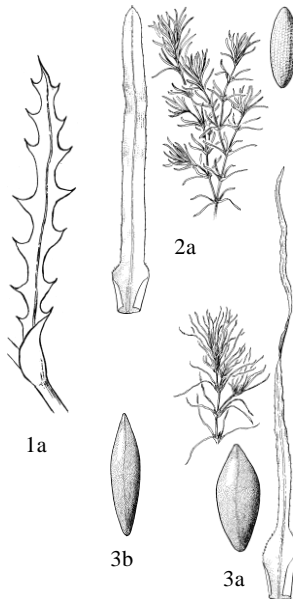


Key expanded to include *N. marina*, which was recently (2020) collected in Missoula County, MT.

Najas L. Water-nymph

Pls ♂♀ or ♂, ♀; fls tiny, axillary, the ♂ enclosed in a membranous, hyaline, saccate bract surrounded by a firmer, entire to 4-lobed, perianthlike structure, filament inconspicuous; stigmas sessile, rather elongate; lvs subopp to whorled (gen 4), toothed (ours minutely so) to entire, dilated and semi-sheathing at base, gen clustered toward st tips and concealing fls, but mature frs plainly visible, when present, as brs elongate. (Gr *naias*, a water-nymph). See Les et al. (2015) for discussion of cryptic spp. in this genus. **Remove pericarp layer to determine seed surface characters.**



1a Lf margins coarsely serrate, 8–13 teeth per side; lvs with prickles on lower surface midrib; bls 0.5–3.9 cm × 0.4–4.5 mm, not tapered distally, apex acute, stiffening with age; seeds coarsely pitted, dull, ovoid, 1.2–2.5 mm; sts to 4.5 dm, br distally; anther 4-celled; submersed pls of brackish or highly alkaline waters; uncommon sw, s, and e US intro known from Missoula Co, MT; spiny w. **1. *N. marina* L.**

1b Lf margins minutely serrulate, 16–100 teeth per side; lvs without prickles on lower surface midrib

2a Lvs tapered mainly for distal 2–3 mm to a somewhat rounded or obtuse but ultimately finely pointed tip, 1–2 cm × 0.5–1.5 mm; seed surface coarsely pitted, dull, seeds ± fusiform, 1.2–2.5 mm; sts rarely > 7 dm; anther 4-celled; submersed pls of freshwater; seldom coll in our area, n WA s, w Cas, to CA, e in Alta and RMS; widespread in c and e N Am; Guadalupe w.; ours **subsp. *guadalupensis***

2 *N. guadalupensis* (Spreng.) Magnus

2b Lvs tapered at least from midlength to a long slender point, 1–3 cm × 0.5–2 mm; seed surface smooth, shining, seeds narrowly to broadly ovoid, (1.2–)2.5–3.7 mm; sts 3–15 dm; anther 1-celled; submersed pls of fresh to slightly brackish water; a cryptic sp. complex often treated as a single sp. (*N. flexilis*)

3a Seeds broadly ovoid, gen 0.9–1.1 mm wide; pls diploid; the common sp. in our area, VI and s BC to CA, e to Alta, n ID and w MT, also Daks, and e to Atl; n Europe; wavy w. **3 *N. flexilis* (Willd.) Rostk. & W.L.E. Schmidt**

3b Seeds narrowly ovoid, gen < 0.7 mm wide; allotetraploid sp. derived from hybridization of nos 2 and 3 and sharing similar ranges and habitats; s BC s, both sides Cas to s WA, e to ID; Can w. **4 *N. canadensis* Michx.**