

IRIDACEAE IRIS FAMILY

Part Two.

Iris L. and *Nemastylis* Nutt.

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Perennial herbs with fibrous roots, rhizomes, bulbs or corms. LEAVES sessile, basal or cauline, linear, basally sheathing. INFLORESCENCES cymes, spikes or solitary flowers, commonly with bracts. FLOWERS usually actinomorphic; perianth petaloid, 6-parted, distinct or connate at the base; stamens 3, distinct or connate, or adnate to outer tepals; pistil 3-carpelled, the ovary inferior, 3-loculed, the style filiform or 3-branched, the branches filiform or flattened and petaloid. FRUITS capsules, loculicidally dehiscent. SEEDS few to many. —80 genera, 1500 spp., worldwide, especially Africa. Many cultivated: *Iris*, *Crocus*, *Gladiolus*, *Freesia*.

1. Flowering stem from thick rhizomes; perianth segments (tepals) dissimilar; outer tepals spreading or reflexed; inner tepals erect; style branches petaloid, covering the stamens . . . *Iris*
- 1' Flowering stems from bulbs or fibrous roots; perianth segments (tepals) similar; style branches not petaloid and not covering the stamens.
 2. Herbs with ovoid or globose bulbs; flowering stems circular in cross section; style 3-branched, the branches deeply 2-parted *Nemastylis*
 - 2' Herbs from fibrous roots; flowering stem flattened; style entire, or if 3-branched, the branches entire *Sisyrinchium*

Iris L. Iris, Flag

Rhizomatous herbs. STEMS erect, simple or branched. LEAVES mainly basal, equitant, linear to ensiform (sword-like). FLOWERS showy, solitary or few to many borne in paired spathe-like bracts; perianth 6-parted, united into a tube at base, the outer 3 tepals (sepals or falls) spreading, sometimes bearded, the inner tepals (petals or standards) erect or arching; stamens 3, opposite the sepals; style branches 3, petaloid, covering the stamens, the apex bifid, the stigmas on the abaxial surfaces. —150 spp. N. Temperate zones, particularly Eurasian. (Greek: *iris* = rainbow)

Iris missouriensis Nutt. Western Iris (of Missouri [river]). Herbs 2-5 dm tall, with rhizomes 1-2 cm thick. LEAVES linear, 6-75 cm long, 3-10 mm wide. FLOWERS 1-4 on stems 20 to 80 cm long, the spathe-like bracts scarious or greenish, lanceolate to ovate, 2.5-7 cm long, 6-12 mm wide; perianth tube 5-8 mm long; sepals 4.5-6 cm long, obovate to oblanceolate, the claw elongate, expanding into a light blue to white blade with blue to violet nerves and a patch of yellow in the center; petals 4-5 cm long, oblanceolate, erect, pale blue to white; anthers 10-15 mm long; style branches 1.5-2.5 cm long. FRUITS 3-6 cm long. [*I. arizonica* Dykes; *I. pelogonus* Goodd.] —Moist meadows; Apache, Cochise, Coconino, Greenlee, Navajo, Yavapai cos.; 1850-3100 m (6000-10200 ft); May-Jul; B.C., Can.; WA to w ND, s to CA and NM; Coah., Mex.

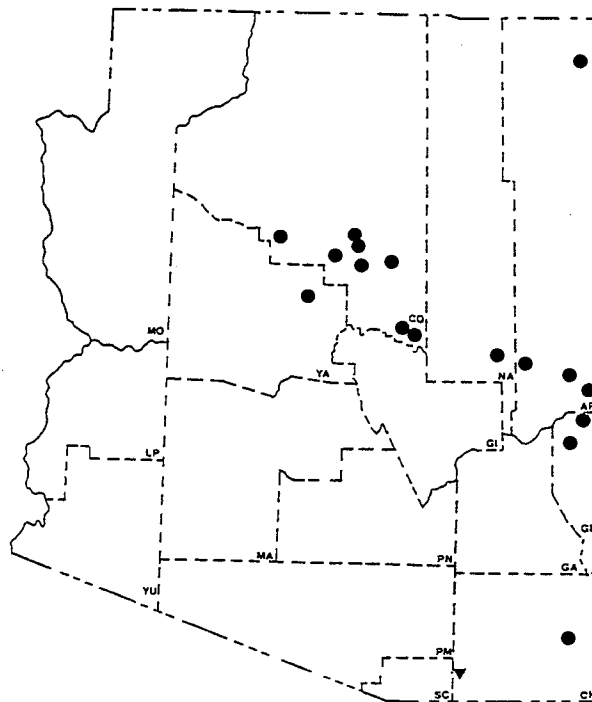
Nemastylis Nutt.

Perennial herbs with ovoid or globose bulbs with dry papery scales. STEMS simple or branched. LEAVES basal and cauline, linear to lanceolate. INFLORESCENCES 1- to few-flowered, terminal, subtended by spathe-like bracts. FLOWERS actinomorphic; tepals distinct or slightly united at the base, blue, purple or white, equal or the outer series slightly larger; stamens distinct or filaments partially to completely connate, the anthers erect, collapsing into a spiral after dehiscing; pistil with style arms bifid almost to the base. FRUIT oblong, to 2.5 cm long, opening at the apex. SEEDS yellow or dark brown, ca. 2 mm long, angular. —5 spp.; N. Amer, Mex, C. Amer. (Greek: *nemo* = thread + *stylos* = style). Goldblatt, P. 1975. *Brittonia* 27:373-385.

Nemastylis tenuis (Herb.) Baker (thin). —Bulbs 2-2.5 cm long, ca. 1.5 cm wide; scales dark brown. STEMS simple, occasionally 1-branched, 12-30 cm high. LEAVES: basal leaves 2-3, 6-28 cm long, 1-2.5 mm wide, linear; cauline leaves 1, 6-15 cm long, 1-2(-3) mm wide. INFLORESCENCES usually 1-flowered; bracts unequal, the outer to 2.5 cm long, the inner to 4 cm long; pedicels shorter than bracts. FLOWERS pale blue; tepals 2-3 cm long, to 9 mm wide, the inner slightly shorter and narrower, oblong-ovate to oblanceolate; stamens with filaments 3-4.5 mm long, united at base for 2-3 mm, the anthers 8-10 mm long; style usually shorter than staminal column, the style arms 3-3.5 mm long. FRUIT oblong, 15-25 mm long. $2n=14$. [*N. tenuis* var. *pringlei* (S. Watson) Foster; *N. pringlei* S. Watson] —Grasslands and open oak and juniper woodlands: Cochise co.; 1600-1900 m (5300-6200 ft); Jul-Sep; TX; Mex. Goldblatt recognizes four subsp., of which only subsp. *pringlei* (S. Watson) Goldblatt occurs in AZ, extending into TX and n Mex. It differs from the others in having longer filaments that are united for about 2/3 of their length and tepals that are longer than in any other subsp.

Sisyrinchium L. Blue-eyed-grass, Yellow-eyed-grass

(See Vascular Plants of Arizona: Iridaceae Part One, A. F. Cholewa and D. M. Henderson, *Journal of Arizona-Nevada Academy of Science* 27(2): 215-218; 1994.)



Iridaceae. Fig. 1. Distribution of *Iris missouriensis* (dots) and *Nemastylis tenuis* (triangles).



Iridaceae Fig. 2. *Iris missouriensis*. Entire plant in flower with stalk bearing two fruits. A. Seed. Reproduced with permission from *Arizona Weeds* by Kittie F. Parker (1972), University of Arizona Press, Tucson. Drawn by Lucretia Breazeale Hamilton.