

**IRIDACEAE IRIS FAMILY**

**Part Two.**

***Iris* L. and *Nemastylis* Nutt.**

Charles T. Mason, Jr.  
Herbarium  
113 Shantz Bldg.  
University of Arizona  
Tucson, AZ 85721

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.

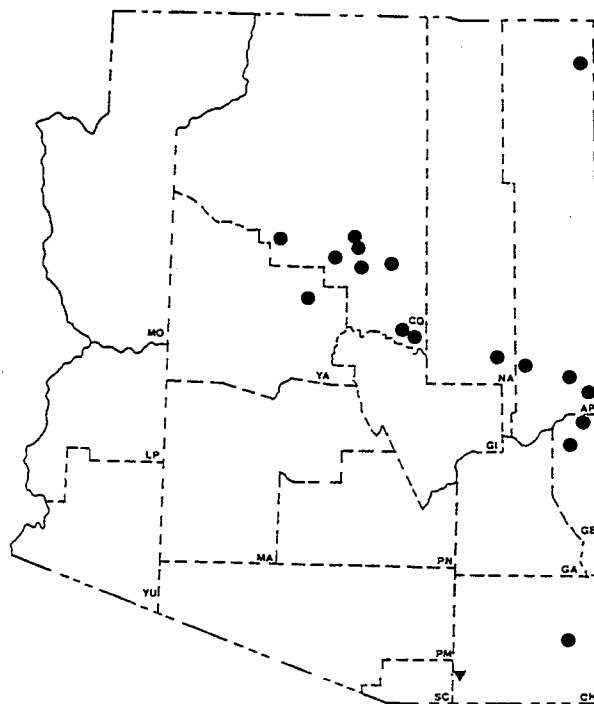
### Nemastylis Nutt.

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.