LENNOACEAE  LENNOA FAMILY

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Annual or perennial (in ours) root parasites, lacking chlorophyll. STEMS fleshy, underground, white or brownish. LEAVES scale-like, spirally arranged. FLOWERS perfect, usually actinomorphic; calyx and corolla tubular, each with 4-10 lobes; stamens 4-10, as many as corolla lobes, borne on the corolla tube in 1-2 series; pistil with 5-16 carpels, each carpel with 2 locules; style 1, stigma lobes 5-9, the ovary superior. FRUITS capsules with irregularly circumscissile dehiscence, covered by the persistent perianth. SEEDS 1 per locule, in a ring, more-or-less kidney-shaped, flat, brown. --2 genera, 4 spp., sw U.S. to n S Amer, seldom common. Some spp. harvested by Indians for food. Yatskievych, G. and C. T. Mason, Jr. 1986. Syst. Bot. 11:531-548.

Pholisma Hook.

STEMS to 1.5 m long. LEAVES 5-25 mm long, linear to triangular, glandular. FLOWERS 7-10 mm long; stamens in 1 series. FRUITS irregularly circumscissile below middle. --3 spp., w AZ, s CA, and nw Mex. (Greek: Pholis = scale, for the scaly stem).

1. Inflorescence a dense panicle or spike; gland-tipped hairs of calyx lobes less than 0.5 mm long

1. Inflorescence a concave head; gland-tipped hairs of calyx lobes 1-1.5 mm long .......... P. arenarium

Pholisma arenarium Hook. (growing on sand). STEMS 30-80 cm long, 1-2 cm in diameter. LEAVES linear to narrowly triangular. INFLORESCENCES dense panicles or spikes. FLOWERS with calyx lobes linear to spatulate, puberulent with gland-tipped hairs less than 0.5 mm long; corolla lavender to bluish purple, the margin white, exterior minutely puberulent; locules of ovary 10-20; 2n = 36. [P. depressum Greene, P. paniculatum B. C. Templeton]. Edges of sandy washes and adjacent, low, desert dunes, in w AZ: La Paz Co.; 100-250 m (400-900 ft); Mar.-May. CA; Baja C, Mex. This uncommon plant is usually parasitic on roots of Ambrosia dumosa (Compositae) in AZ, but elsewhere has been found on various other shrubby Compositae, and species of Croton (Euphorbiaceae) and Eriodictyon (Hydrophyllaceae).

Pholisma sonorae (A. Gray) Yatsk. (of Sonora). Sand food. STEMS 0.5-1.5 m long, 0.5-2 cm in diameter. LEAVES linear. INFLORESCENCES concave, flattened heads. FLOWERS with calyx lobes linear, long-tapered, feathery-pubescent with gland-tipped hairs 1-1.5 mm long; corolla pink to purple, the margin white, exterior glabrous; locules of ovary 12-32; 2n = 36. [Ammobroma sonorae A. Gray]. Endemic to dunes and sandy areas near the Gulf of CA: sw AZ: Yuma Co.; 50-150 m (100-450 ft); Mar.-Jun. se CA; ne Baja C., nw Son., Mex. This unusual, rare plant has been found to parasitize roots of Eriogonum deserticola (Polygonaceae), Tiquilia palmeri and T. plicata (Boraginaceae), Ambrosia dumosa, and Fluehea sericea (Compositae). Its habitat and host plants have been endangered by farming and recreational vehicle use in the fragile dune areas to which these plants are endemic.
Lennoaceae Figure 1. Illustrations of Pholisma species. Pholisma sonorae: a, habit; b, surface view of inflorescence; c, flower; d, corolla dissection; e, fruit showing dehiscence. Pholisma arenarium: f, inflorescence; g, flower; h, corolla dissection. i, distribution of Pholisma species in Arizona. From Yatskievych and Mason (1986), reprinted with permission.