

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.

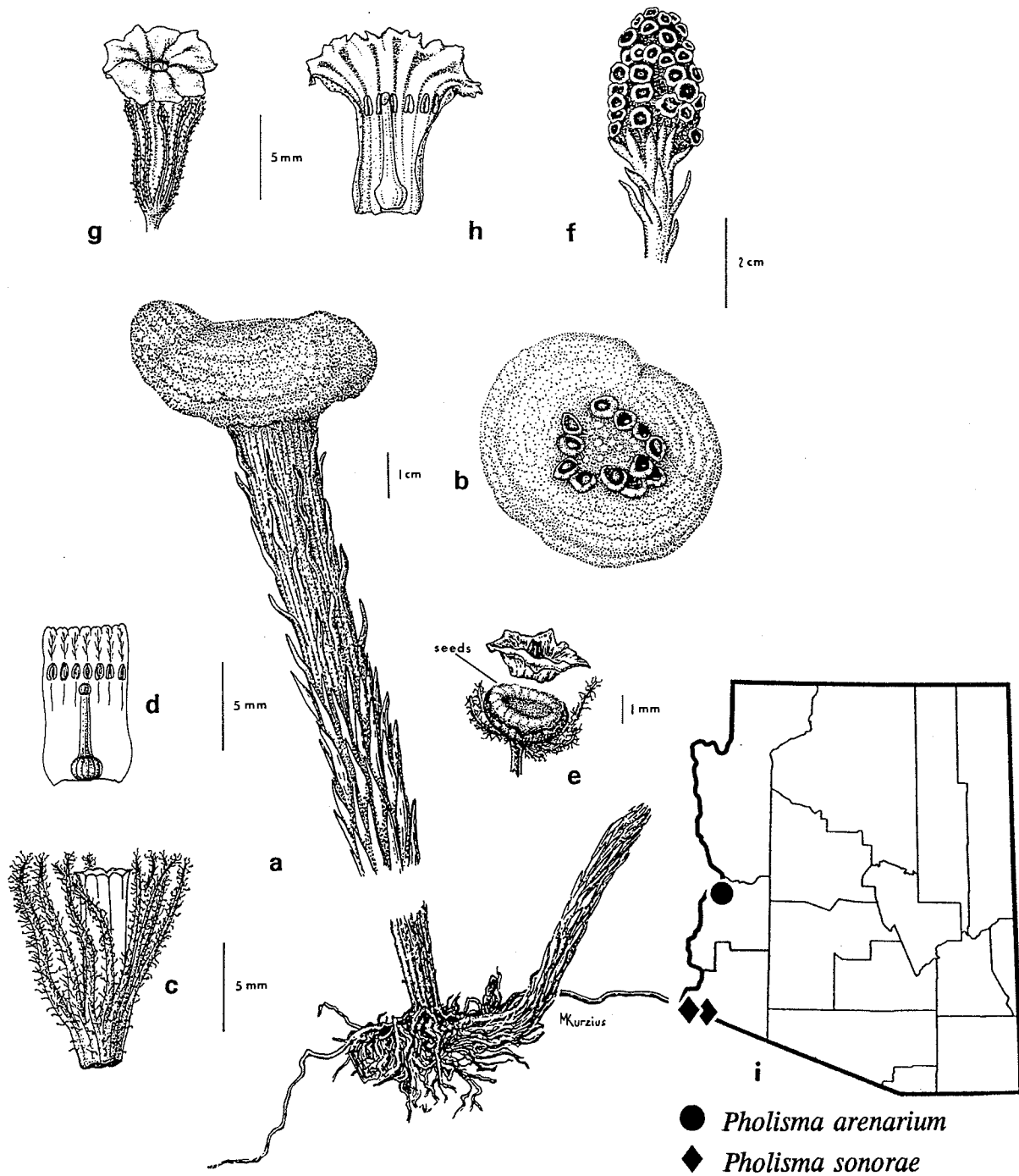
Pholisma Hook.

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

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 *Pluchea 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 sonora*: 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.