

Sclerolinon digynum (A.Gray) C.Rogers
northwestern yellowflax
Linaceae (Flax family)

Status: State Sensitive
Rank: G5S1

General Description: Adapted from Hickman et al. (1993): This annual plant is smooth and hairless, with an erect, somewhat branched stem that is 2 to 7¼ in. (5-20 cm) tall, and more or less upright, opposite, oblong leaves that are 1/8 to ½ in. (5-16 mm) long. The lower leaves are entire and the upper leaves are serrate. The inflorescence is flat to round topped and is dense with leaf-like bracts. The flower stalks are greater than 1/8 in. (3 mm) long. The flowers have 5 unequal sepals, which are 1/8 to ¾ in. (2-3 mm) long. There are 5 yellow petals that are 1/8 in. (3-4 mm) long, and have conspicuous gland-toothed margins. The upper bracts are serrulate (toothed along the margin). Like all members of the family, the petals are easily detached. There are 5 stamens and 2 free styles. The stigmas are narrower than the styles. There are 4 rough-surfaced nutlets, which are less than 1/16 in. (1 mm), flattened to round in shape, and somewhat mucilaginous (slimy) when wet.

Identification Tips: *Sclerolinon digynum* is the only member of its genus. Within the Linaceae family it is the only species with yellow flowers and serrulate bracts.

Phenology: This species has been found in flower in Washington from June through late July.

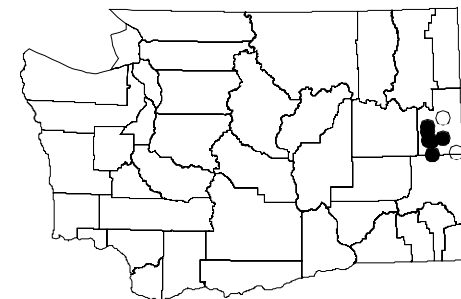
Range: This species is known from Washington south to California and east to Idaho (where it may no longer be extant). In Washington it is known to occur in Spokane County.

Habitat: This species grows in Washington at elevations of 1000 to 2440 feet (300-740 m). It is found within and on the margins of vernal pools in grasslands and mound and swale topography in eastern Washington. Associated species include hairy owl's-clover (*Castilleja tenuis*), camas (*Camassia quamash*), thyme-leaf broomspurge (*Euphorbia serpyllifolia*), knotweed (*Polygonum polygaloides*), Pacific foxtail (*Alopecurus saccatus*), trefoil (*Lotus purshiana*), sedges (*Carex* spp.), California oatgrass (*Danthonia californica*), and popcorn flower (*Plagiobothrys* spp.).

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For an illustration, see *The Jepson Manual*

Known distribution of
Sclerolinon digynum
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Curtis Bjork

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Ecology: This species is found in seasonally wet, gravelly to rocky soil, often in areas of thin soil above basalt bedrock. It can grow in slightly disturbed areas, but not in areas dominated by reed canary grass (*Phalaris arundinacea*) and spreading bentgrass (*Agrostis stolonifera*). Like many annuals, northwestern yellowflax may not germinate in dry years.

State Status Comments: The limited distribution and specialized habitat of this species are the primary factors for its state status.

Inventory Needs: Additional inventory is needed in vernal pool habitats in Spokane County and adjacent counties.

Threats and Management Concerns: It is recommended that the occurrence sites are not disturbed and that cattle grazing and off-road vehicles are not allowed into the areas. In some previous collection and observation sites it no longer exists due to loss of habitat and invasive species.

Comments: This species is described in Hitchcock et. al. (1961) as *Linum digynum*, but it is now placed within the genus *Sclerolinum*, which is a monospecific genus.

References:

Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.



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