**SPECIES FACT SHEET**

**Common Name:** Pacific fingerwort or wood fingerwort (Edwards 2003)  
**Scientific Name:** Kurzia makinoana (Steph.) Grolle

Division: Marchantiophyta (incorrectly called Hepatophyta in ITIS; see Stotler and Crandall-Stotler 2008)  
Class: Jungermanniopsida  
Order: Jungermanniales  
Family: Lepidoziaceae

**Taxonomic Note:** Plants from Oregon currently identified as Kurzia makinoana are likely referable to K. sylvatica. (A. Evans) Grolle. See Doyle and Stotler (2006) for discussion; Doyle calls plants from California K. sylvatica and distinguishes this from K. makinoana. Damsholt (2002) states that K. sylvatica is found only in eastern North America and "in E Asia is replaced by the closely related K. makinoana ...". The only species Damsholt mentions as occurring in western North America (British Columbia only) is K. trichoclados (Müll. Frib.) Grolle. Schofield (2002) states there are three species of Kurzia in the Pacific Northwest: K. pauciflora, K. sylvatica, and K. trichoclados. More study is obviously necessary. The discussion of taxonomic issues in Fredericks and Dewey (2005a) is good:

Inoue (1974) recognizes four species of Kurzia in the northern temperate-boreal zone. Schuster (1969) concurs, recognizing K. sylvatica and K. setacea (=K. pauciflora) within North America and noting that K. trichoclados appears confined to Europe while K. makinoana may be restricted to Japan. Smith (1990) and Paton (1999) recognize K. sylvatica, K. pauciflora (= K. setacea) and K. trichoclados in Europe. Hattori and Mizutani (1958) regard K. sylvatica and K. trichoclados as conspecific with K. makinoana, and hence, recognize K. makinoana and K. setacea as the only distinct Kurzia species within the northern temperate-boreal zone. Hong (1988) recognizes K. sylvatica, K. setacea and K. trichoclados in western North America, noting multiple sites of the former two taxa in British Columbia. Schofield (1968) notes numerous sites of K. makinoana from British Columbia, but in more recent discussions with John Christy (Schofield 2003), “Any records of Kurzia makinoana from N(orth) A(mERICA) should be treated with scepticism, but (Kurzia) pauciflora (= Kurzia setacea) and (Kurzia) sylvatica, at least are clearly on both coasts.” Godfrey (1969) reports K. makinoana and K. setacea from southwestern British Columbia, with determination of the former species based on material examined by Inoue. Whittemore (1999) lists K. sylvatica for California but notes, that “Populations of this species from the Pacific Coast are often treated as a distinct species under the name Kurzia makinoana (Steph.) Grolle.” There currently is not a consensus among experts as whether K. makinoana and K. sylvatica are separable species or, accepting that they are, whether one or both taxa are present in western North America. If K. makinoana and K. sylvatica are to be regarded as conspecific, then it appears appropriate that the latter be regarded as a synonym of the former. The concept of K. makinoana appears to have been first published in 1897 (as Lepidozia makinoana Steph.), while that of K. sylvatica appears to have been first published in 1904 (as Lepidozia sylvatica Evans). In this document, the name K. makinoana is applied in a broad sense, including the concepts of both K. makinoana (Steph.) Grolle and K. sylvatica (Evans) Grolle.
Technical Description: "Stem 2–4 cm long, usually regularly branched (bipinnate or pinnate), with numerous flagellae. Leaves distant, near the apex +/- approximate, transversely inserted, widely spreading, concave, deeply trifid (2–4-lobate), lobes narrowly triangular, incurved, basally 2–3 cells wide, incisions acute. Cells in the lobes 15–20 X 20–30 µm, quadrate-rectangular, with a smooth or faintly papillose cuticle, walls of the cells thin. Underleaves similar to the lateral leaves but the lobes shorter. Gemmae absent. Female bracts ovoid and not or very little lobed, apex dentate, not ciliate. Perianths long, trigonous in the upper part, with constricted, shallowly 4–5 lobed, dentate (not ciliate) mouth. (K. trichoclados)

...up to ¼ bilobed female bracts with pointed, dentate and shortly ciliate lobes. Mouth of perianth with cilia 2–4 cells about 30 µm long. (K. sylvatica)

After Arnell (1981), wording slightly modified. Doyle, in Doyle and Stotler (2006), writes, "Kurzia sylvatica can be separated by a) stem leaves usually overlapping (vs. stem leaves somewhat remote in K. makinoana), b) stem leaves symmetrical, with the dorsal leaf lobe as large as the ventral leaf lobe (vs. stem leaves asymmetrical, with the dorsal leaf lobe smaller [often spinose] than the ventral leaf lobe), and c) underleaves asymmetrical with 1-2 lobes markedly reduced or aborted (vs. underleaves usually symmetrical or with only one lobe slightly smaller in size)."

Distinctive Characters: Very slender, shoots hardly 0.3 mm wide, regularly pinnately branched, in dense, felt-like mats over rotting wood or decayed organic matter. Leaves and underleaves divided into three or four, finger-like lobes.

Similar species: Lepidozia reptans has a similar pinnate branching pattern and may occur in patches of diminutive plants nearly as small as Kurzia. Its leaves are divided into four lobes only ½ the leaf length. Blepharostoma trichophyllum may be almost as small as Kurzia and has leaves divided to the base into 3–4 slender, finger-like lobes which are, however, straight and composed of a single row of cells. Separating species of Kurzia with certainty is considered possible only by means of the perianths and female bracts (Arnell 1981, Smith 1990).

Life History: Published studies of life history traits in this species have not been located. Plants are perennial and identifiable (at least to genus) throughout the year. Archegonial shoots have been seen in Oregon material but no sporophytes.

Range, Distribution, and Abundance: The only documented site in Oregon is from Coos County, at New River ACEC, Coos Bay District, BLM. Reported (as K. sylvatica) from Humboldt and Mendocino Counties, California (Doyle and Stotler 2006) and from Del Norte County (Schofield, pers. comm.).
This or a similar species is found on the Olympic Peninsula in Washington (Hutten, et al. 2005) and in Snohomish County on the Mt. Baker-Snoqualmie National Forest (Fredericks and Dewey 2005a).

ORNHIC listed in Coos County.

BLM: Documented in Coos Bay.
USFS: Suspected in Siuslaw and Rogue River-Siskiyou National Forests.

**Habitat Associations:** Found in coastal wetland sites on decaying wood; associated with other decaying wood bryophytes: *Cephalozia* spp., *Chiloscyphus* spp., etc.

**Threats:** Habitat disturbance which changes wetland hydrology would negatively affect this species.

**Conservation Considerations:** See Conservation Assessment by Fredericks and Dewey (2005a).

**Conservation Rankings and Status:**
Global: G2G4Q; Oregon: S1
ORNHIC List 3
Washington: Not ranked

BLM/USFS Sensitive Species in Oregon

**Other pertinent information:**

**Surveys and Survey Protocol:** Pay close attention to coastal wetlands with a forest canopy.


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**Edited by:** Rob Huff
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**Updated by:** David Wagner, 2010 (attached photographs)

**ATTACHMENTS:**
(1) Photos
References:


Attachment 1 – Photos

Shoot with young gynoecium at base
Shoot tip

Shoot tip, dorsal aspect
Shoot tip, ventral aspect

Shoot sector, ventral aspect, showing underleaves