Iwatsukiella leucotricha (Mitt.) W.R. Buck & H.A. Crum
Iwatsukiella Moss
Pterigynandraceae
status: State Endangered, USFS sensitive
rank: G4G5 / S1

General Description: Whitish green to yellowish green creeping moss, forming thin small mats or sometimes woven in with other bryophytes. Stem leaves small, 0.7-1.0 x 0.3-0.4 mm, concave, suborbicular with a long, clear, often recurved hairpoint on the tip. Leaf margins entire below, often slightly toothed above. Costa usually lacking, but sometimes short and double. Alar cells scarcely differentiated. Median leaf cells oblong or rhombic, 12-16 x 3-5.5 µm, smooth, strongly thick-walled. Branch leaves similar to the stem leaves but smaller. Tiny leaflike structures occur on the stems at the base of the leaves.

Reproductive Characteristics: Produces male and female sex organs on separate plants. Capsules erect, oblong-cylindric or oblong, about 1.5 mm long, dark brown. Peristome teeth linear-lanceolate, up to 0.25 mm long.

Identification Tips: In N.A., I. leucotricha is virtually always sterile. It is distinguished by its long, clear recurved hairpoints, lack of a costa (or short and double costa), and small leaflike structures on the stems at the base of the leaves. It could be confused with Ulota megalospora or Pseudoleskea stenophylla, which occur in similar habitats. However, both those species have a costa and do not have small leaflike structures on their stems.

Range: Japan and adjacent eastern Asia, coastal areas of AK, BC, WA, and OR.

Habitat/Ecology: On trunks, twigs, and branches of conifers along exposed, fog-drenched, high-elevation coastal ridges; usually restricted to the maritime zone. Common substrates include noble fir (Abies procera), Pacific silver fir (Abies amabilis), Douglas-fir (Pseudotsuga menziesii), and western hemlock (Tsuga heterophylla); less frequently on Sitka alder (Alnus sinuata) or red alder (Alnus rubra). In B.C., it commonly grows in fens and bogs.

Comments: In WA, I. leucotricha is not abundant at any of its few locations. Its distribution is probably limited by the lack of exposed, high-elevation coastal ridges between the Columbia River and Olympic Peninsula. Threats include timber harvest, road and trail maintenance, and collecting. It is also rare in OR, but more common in Asia.


Adapted from Field Guide to the Rare Plants of Washington
http://www.washington.edu/uwpress/search/books/CAMFIE.html