

Texosporium sancti-jacobi (Tuck.) Nádv.

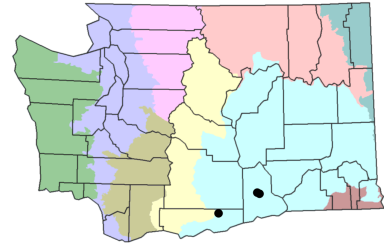
woven-spore lichen

Caliciaceae - pin lichen family

status: State Threatened, Federal Species of Concern,

BLM strategic

rank: G3 / S1



General Description: Crustose lichen with thin, whitish to pale greyish thallus, 0.5-3 cm diameter, on organic matter or organic soil.

Reproductive Characteristics: Apothecia sessile, circular, 0.5-1.5 mm diameter, with margins colored like the thallus; filled with a loose, powdery spore mass, blackish to dark olive green, sometimes tinged with bright yellow. Spores 2-celled, a feature apparent only in immature spores at base of the apothecium. As spores mature, they are tightly wrapped with fungal hyphae that become darker and thicker, obscuring the spore structure. Spore size 36-44 x 20-26 μm , including fungal coat. Thallus and apothecia are persistent throughout the year, but easiest to spot in the spring, when the ground is moist.

Identification Tips: Whitish-margined apothecia with a dark olive, loose spore mass are diagnostic; the spores will dislodge when touched. A loose spore mass is also found in *Cyphelium* and *Thelomma* spp., but these grow exclusively on wood, while *T. sancti-jacobi* grows only on organic soil. Possibly confused with other whitish crustose lichens with dark soredia arranged in roundish soralia (e.g., *Trapeliopsis* spp.). However, soralia do not have a whitish margin and are much smaller than *T. sancti-jacobi* apothecia.

Range: CA, eastern OR, southeastern WA, southwestern ID.

Habitat/Ecology: Arid to semiarid shrub steppe, grassland, biscuit scabland, or savannah communities up to 1000 m (3300 ft) elevation, on flat to gentle north-facing slopes. Soils are non-saline and noncalcareous. Most sites are relatively undisturbed and dominated by native plants, including sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), Idaho fescue (*Festuca idahoensis*), and bluebunch wheatgrass (*Pseudoroegneria spicata*). *T. sancti-jacobi* is most common on decomposing bunchgrass clumps that are impregnated with soil but elevated above the surrounding surface. It is also found on old, decaying mammal scat. Fire generally eliminates the species.

Comments: Threats include habitat conversion to agriculture or suburban development, fire, overgrazing, weed invasion, and recreational activities that reduce organic matter and disrupt soil surfaces. The taxon is also rare in ID, OR, and CA.

References: McCune & Rosentreter 1992; Tibell & van Hofsten



© Pam Camp