

## *Sulcaria isidiifera*, Sponsorship for the CALS Conservation Committee

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### TAXONOMY

**Accepted scientific name:** *Sulcaria isidiifera* Brodo.

**Common name:** splitting yarn lichen.

**Type specimen and location:** U.S.A., California, San Luis Obispo County, Los Osos Oaks State Reserve, Los Osos Valley Road, altitude 100 ft., in *Adenostoma fasciculatum*. Bratt 3871 (SBBG), et. J. Larson, 8 Jan 1984 (holotypus:CANL; isotypi: US, hb. BRATT).

**Synonyms:** none.

### DESCRIPTION

From Brodo (1986): Thallus dull yellowish-white grading into light brown and reddish-brown at the more exposed tips; rarely shades of olive-gray in places ... 3-5 cm long; main branching isotomic to anisotomic-dichotomous, with more-or-less perpendicular spinulose branches developing from splits in the thallus; branches splitting lengthwise and opening into rather wide linear soralia filled with spinulose isidia and spinules, often with brown tips; main branches 0.3 - 0.5mm wide ... very brittle ... . Apothecia and pycnidia not seen.

### Similar species and distinguishing characteristics:

Many filamentous fruticose lichens can be initially mistaken for *Sulcaria isidiifera*: *Alectoria sarmentosa*, some species in the genus *Usnea*, *Bryoria spiralifera* and other pale species in the genus *Bryoria*. No other lichen has longitudinal soralia that split open to reveal isidia.

### Biological characteristics:

**Growth form:** fruticose, filamentous, caespitose  
reproductive method: isidia. Fertile material unknown.

**Dispersal agents:** gravity, wind, animals.

**Substrate and specificity:** within coastal scrub, it is not specific, appearing on *Adenostoma fasciculatum*, *Quercus dumosa*, *Quercus agrifolia*, *Ceanothus ramulosus*, and unidentified shrubs.

**Habitat and specificity:** old-growth coastal chaparral scrub.

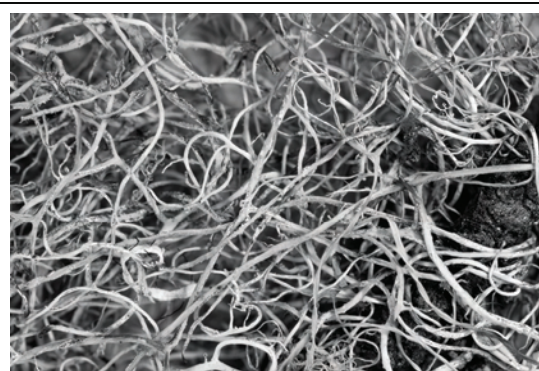
**Pollution sensitivity:** unknown.

**Ecological function:** unknown.

### GEOGRAPHY

**Global:** Occurs only in the type locality, distributed sporadically within an area less than seven miles across.

**Local:** Occurs only in the type locality, distributed sporadically within an area less than seven miles across. There are nineteen records available from herbaria online, an unknown number from herbaria that do not have online catalogs (COLO, IRVC, US; Reifner 1995), and a number of private collections also exist. Five of these online records have location information suitable for mapping, and all lie within a three-mile circle. One anecdotal location (Reifner



*Sulcaria isidiifera*, Knudsen 4613 (UCR). Image © Janet Good 2007, printed with permission. (repeated in color on back cover.

1995) extends the area of occupancy by four miles.

#### POPULATION TRENDS

Unknown.

#### THREATS

**History:** Development is a serious threat to this lichen, given its apparent preference for coastal environs, which are highly desirable for real estate development. The communities of Los Osos and Baywood have grown significantly since the discovery and description of this taxon in 1984 and 1986. It is certain that populations of this lichen have already been removed in the course of development



of the communities, as several remaining populations are interspersed with residential neighborhoods and community structures (schools).

**Future:** Coastal chaparral is vulnerable in two ways: one is through development and two is its short fire history cycle. Old-growth coastal scrub is not a rapidly-increasing habitat.

#### PROTECTION

Many of the occurrences are within the boundaries of state parks: Montana de Oro State Park, Morro Bay State Park, Los Osos Oaks State Reserve. Reifner (1995) states that it is most abundant at Montana de Oro. Others are on unregulated lands, or on private property.

*Sulcaria isidiifera* is listed as G1/S1.1 by the California Department of Fish and Game (2007).

#### SPECIFIC CONSERVATION RECOMMENDATIONS

**Recommended Global Rarity Rank:** G1

**Recommended Global Threat Rank:** .1

**Recommended Local Rarity Rank:** S1

**Recommended Local Threat Rank:** .1

**Recommended List(s) (CNPS equivalent):** 1B

Recommended conservation / management actions (consider site maintenance, monitoring, research, amendments to existing management plans, agencies/organizations to be involved, etc.)

#### RELEVANT EXPERTS AND KNOWLEDGABLE

##### LOCAL BOTANISTS.

Lisa Andreano  
Environmental Scientist  
California Department of Parks and Recreation  
San Luis Obispo Coast District

Kerry Knudsen  
Lichen Curator  
The Herbarium  
Department of Botany & Plant Sciences  
University of California  
Riverside, CA 92521-0124.

James C. Lendemer  
Lichenologist  
Cryptogramic Herbarium  
Institute of Systematic Botany  
The New York Botanical Garden  
Bronx, NY, 10458-5126

#### STAKEHOLDERS FOR NOTIFICATION OF COMMENT PERIOD

CDPR: Attention Vince Cicero, Lisa Andreano  
750 Hearst Castle Road.  
San Simeon, Ca

CDFG: Attention Deb Hillard  
Morro Bay Field Office  
PO Box 1079  
Morro Bay, Ca 93442

Los Osos Community Service District  
2122 9<sup>th</sup> St  
Los Osos, Ca 93402

SLO County, Natural Resources  
1050 Monterey St  
San Luis Obispo, Ca. 93408

USFWS, Ventura Field Office  
Attention Steve Henry  
2493 Portola Rd. Suite B  
Ventura, Ca. 93003

BLM  
Attention Mr. Larson  
Bakersfield Field Office  
3801 Pegasus Dr  
Bakersfield, Ca 93308

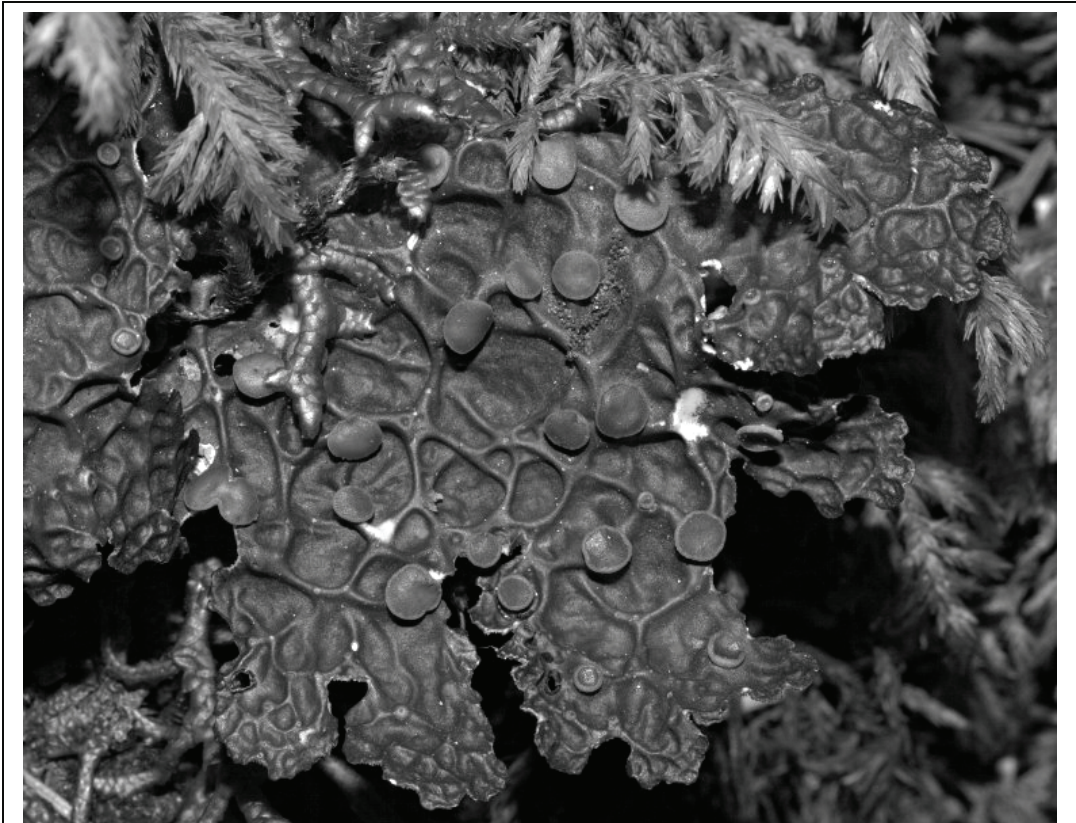
Calif. Native Plant Society (CNPS)  
Linda Chipping  
San Luis Obispo Chapter (no address listed)

Morro Estuary Greenbelt Alliance (MEGA)  
PO Box 6801  
Los Osos, Ca 93412

Small Area Wilderness Preserve (SWAP)  
PO Box 6442  
Los Osos, Ca 93412

**LITERATURE CITED**

- Brodo, I.M. 1986. A new species of the lichen genus *Sulcaria* (Ascomytina, Alectoriaceae) from California. *Mycotaxon* 27:113 - 117.
- California Department of Fish and Game, Natural Diversity Database. October 2007. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 69 pp.
- Reifner, R.E., Jr., Bowler, P.A., Ryan, B.D. 1995. New and interesting records of lichens from California. *Bulletin of the California Lichen Society* 2(2).



*Pseudocyphellaria anthraspis*. Photographed on Mount Tamalpais field trip by Michelle Caisse.

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The deadline for submitting material for the Summer 2008 CALS Bulletin is 30 April 2008.

### Back cover:

- A) Seminal meeting to form the California Lichen Society at the Shingle Mills cabin of Richard and Janet Doell, Santa Cruz Mountains, January 29, 1994. Present are (left to right): Richard Doell, Barbara Lachelt, Darrell Wright, Janet Doell, Nancy Brewer, Doris Baltzo, Ellen and Harry Thiers, Mona Borell, Bill Hill, Charis and Peter Bratt. Photography by Bill Hill. See article on page 52.
- B) *Sulcaria isidiifera*, Knudsen 4613 (UCR). Image © Janet Good 2007, printed with permission. See article on page 45.

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